INDEX

Volume 12, 1967

Soviet Physics – Crystallography

AUTHOR INDEX

SOVIET PHYSICS - CRYSTALLOGRAPHY
Volume 12, 1967
A translation of Kristallografiya

ABDULLAEVA, Ya. S.
Effect of X Rays on the Growth of $CuSO_4$ Crystals from Aqueous Solution. (E) Ya. S. Abdullaeva and G. A. Gumanskii. 12, 967 (1968) [12, 1099 (1967)]

ABLOV, A. V.
Electron Diffraction Determination of the Structure for the Lamellar Copper Glycinate Monohydrate Phase. (E) B. K. Vainshtein, I. A. D'yakon, and A. V. Ablov. 12, 299 (1967) [12, 354 (1967)]

AKHUNDOV, S. A.
A Criterion for the Applicability of the Born Approximation to Electron-Diffraction Structural Studies. (T) V. F. Dvoryankin, A. Yu. Mityagin, and S. A. Akhundov. 12, 509 (1968) [12, 579 (1967)]

AKULENOK, E. M.
Influence of Block Structure and Slip Planes on the Divergence of the Laser Radiation of Ruby Crystals. (E/T) E. M. Akulenok, Kh. S. Bagdasarov, V. S. Papkov, and V. Ya. Khaimov-Mal'kov. 12, 237 (1967) [12, 286 (1967)]

ALEKSANDROV, K. S.
Electrooptical Properties of Rochelle Salt. (E) A. T. Anistratov and K. S. Aleksandrov. 12, 392 (1967) [12, 459 (1967)]
Hindered Motion and Phase Transitions in the Propionates. (E/T) I. P. Aleksandrova, L. I. Zherebtsova, and K. S. Aleksandrov. 12, 780 (1968) [12, 894 (1967)]

ALEKSANDROVA, I. P.
Hindered Motion and Phase Transitions in the Propionates. (E/T) I. P. Aleksandrova, L. I. Zherebtsova, and K. S. Aleksandrov. 12, 780 (1968) [12, 894 (1967)]

ALESKOVSKII, V. B.
Preparation, Structure, and Some Photoelectric Properties of Single- and Multilayer Monocrystalline Chalcogenide Films of the Types $A^{II}B^{VI}$ and $A^{IV}B^{VI}$. (E) L. A. Sergeeva, I. P. Kalinkin, and V. B. Aleskovskii. 12, 90 (1967) [12, 113 (1967)]

AL'TMAN, L. V.
Epitaxy of Cadmium Selenide on CaF_2. (E) L. V. Al'tman, E. N. Vorontsova, Yu. V. Ruban, and G. P. Tikhomirov. 12, 601 (1968) [12, 694 (1967)]

ALYBAKOV, A. A.
Mechanical Properties of Irradiated Sodium Fluoride Single Crystals Containing a Uranium Impurity. (E) A. A. Alybakov and Y. Shamyrkanov. 12, 635 (1968) [12, 726 (1967)]

ANDREEV, G. A.
Distribution of Impurities in the Crystallization of NaCl, KCl, and KBr from Aqueous Solutions. (E/T) G. A. Andreev. 12, 82 (1967) [12, 104 (1967)]
Distribution of KOH and KNO_3 Impurities in the Crystallization of KBr from the Melt and Their Effect on Crystal Density. (E) G. A. Andreev. 12, 121 (1967) [12, 148 (1967)]

ANDRIEVSKII, R. A.
Ternary Compounds in the Zr-H-C and Zr-H-N Systems. (E) R. A. Andrievskii, E. B. Bolko, and V. P. Kalinin. 12, 930 (1968) [12, 1068 (1967)]

ANISHCHENKO, R. I.
Atomic Scattering Factors for X Rays and Effective Charges of Atoms in Semiconductors of Type $A^{III}B^{V}$. (T) R. I. Anishchenko and A. N. Gusatinskii. 12, 440 (1967) [12, 514 (1967)]

ANISTRATOV, A. T.
Electrooptical Properties of Rochelle Salt. (E) A. T. Anistratov and K. S. Aleksandrov. 12, 392 (1967) [12, 459 (1967)]

ASABIN, A. N.
Nuclear Magnetic Resonance Study of Ruby Single Crystals. (E) V. S. Pavlovskaya, V. F. Belov, M. D. Kapustina, A. N. Asabin, and V. Ya. Khaimov-Mal'kov. 12, 41 (1967) [12, 51 (1967)]

ASADOV, Yu. G.
Polymorphous Single Crystal-Single Crystal Transition in Silver Nitrate. (E) Yu. G. Asadov. 12, 537 (1968) [12, 618 (1967)]

AVER'YANOVA, T. M.
Interaction of Dislocations with Block Boundaries in NaCl Crystals. (E) L. I. Mirkin and T. M. Aver'yanova. 12, 450 (1967) [12, 521 (1967)]
Effect of Light Pulses on the Dislocation Structure of Sodium Chloride. (E/T) T. M. Aver'yanova, L. I. Mirkin, and N. F. Pilipetskii. 12, 889 (1968) [12, 1022 (1967)]

AZARKH, Z. M.
X-Ray Phase Analysis of the Erbium-Hydrogen System. (E) Z. M. Azarkh and P. I. Gavrilov. 12, 932 (1968) [12, 1070 (1967)]

BABUSHKINA, T. A.
Phase Transitions in Molecular Crystals of C_6Cl_6F and C_6Br_5F. (E) T. A. Babushkina, V. M. Kozhin, V. I. Robas, I. A. Safin, G. K. Semin, and T. L. Khotsyanova. 12, 116 (1967) [12, 143 (1967)]

BADIYAN, E. E.
X-Ray Diffraction Method of Determining Substructure. (T/E) B. Ya. Pines, E. E. Badiyan, A. F. Sirenko, and D. D. Solnyshkin. 12, 365 (1967) [12, 423 (1967)]

BAGDASAROV, Kh. S.
Influence of Block Structure and Slip Planes on the Divergence of the Laser Radiation of Ruby Crystals. (E/T) E. M. Akulenok, Kh. S. Bagdasarov, V. S. Papkov, and V. Ya. Khaimov-Mal'kov. 12, 237 (1967) [12, 286 (1967)]
A Continuous Laser Based on $Y_3Al_5O_{12}$-Nd^{3+} and Working at 300°K. (E) Kh. S. Bagdasarov, F. M. Zubkova, A. A. Kaminskii, A. M. Kevorkov, and V. Ya. Khaimov-Mal'kov. 12, 304 (1967) [12, 358 (1967)]

BAKAKIN, V. V.
X-Ray Study of the Sodium-Iron Metagermanate $NaFeGe_2O_6$. (E) L. P. Solov'eva and V. V. Bakakin. 12, 517 (1968) [12, 591 (1967)]

BARANOVA, R. V.
Electron-Diffraction Determination of the Crystal Structure of the Hexagonal β^1 Phase in the Cu-Te System. (E/T) R. V. Baranova. 12, 221 (1967) [12, 266 (1967)]

BARYNIN, V. V.
The Crystal Structure of Catalase. (E) B. K. Vainshtein, V. V. Barynin, G. V. Gurskaya, and V. Ya. Nikitin. 12, 750 (1968) [12, 860 (1967)]

BASS, I. A.
Method for the Quantitative Evaluation of the Macroscopic Block Structure (Nonsingle-Crystallinity) of Corundum. (E) I. A. Bass and S. D. Krasnenkova. 12, 631 (1968) [12, 723 (1967)]

BATIST, R. De
Charged Dislocations in Cesium Iodide. (E/T) R. De Batist, E. von Dingen, Yu. N. Martyshev, I. M. Sil'vestrova, and A. A. Urusovskaya. 12, 881 (1968) [12, 1012 (1967)]

BELOV, N. V.
The Garnet Pattern in the Structure of Iron Molybdate. (T/E) L. M. Plyasova, S. V. Borisov, and N. V. Belov. 12, 25 (1967) [12, 33 (1967)]
The Simplest Laminar Silicates in Terms of Shubnikov (Anti) Symmetry Groups. (T) N. V. Belov and Yu. A. Kharitonov. 12, 196 (1967) [12, 235 (1967)]
Crystal Structure of $SrMoO_4$. (E) Yu. K. Egorov-Tismenko, M. A. Simonov, and N. V. Belov. 12, 436 (1967) [12, 511 (1967)]
Structural Analysis and Chemical Crystallography of Silicates in the USSR. (R) N. V. Belov. 12, 684 (1968) [12, 775 (1967)]

Characteristics of the Crystal Structure of Rinkite. (E) V. I. Simonov and N. V. Belov. 12, 740 (1968) [12, 848 (1967)]

BELOV, V. F.
Nuclear Magnetic Resonance Study of Ruby Single Crystals. (E) V. S. Pavlovskaya, V. F. Belov, M. D. Kapustina, A. N. Asabin, and V. Ya. Khalmov-Mal'kov. 12, 41 (1967) [12, 51 (1967)]

BELOUSOVA, V. V.
Characteristics of the Growth of Silicon Single Crystals from the Gas Phase. (T/E) I. V. Salli, É. S. Fal'kevich, Yu. S. Dement'ev, E. N. Chukal'skii, V. V. Belousova, and V. G. Khrebtishchev. 12, 425 (1967) [12, 499 (1967)]

BELYAEV, L. M.
Experimental Investigation of the Rotation of the Plane of Polarization of Light in Dithionate Crystals. (E/T) L. M. Belyaev and Z. B. Perekalina. 12, 243 (1967) [12, 391 (1967)]

BLOKH, O. G.
Temperature and Wavelength Dependences of the Electrooptical Coefficient r_{63} in ADP Crystals. (E) O. G. Blokh and L. F. Lutsiv-Shumskii. 12, 380 (1967) [12, 443 (1967)]
Spontaneous Electrooptical Effect in Rochelle Salt Crystals. (E) O. G. Blokh and L. F. Lutsiv-Shumskii. 12, 389 (1967) [12, 455 (1967)]

BOIKO, B. T.
Effect of Annealing on the Properties of the Mosaic Structure of Al and Sn Vacuum Condensates. (E) L. S. Palatnik, M. Ya. Fuks, B. T. Boiko, and P. A. Panchekha. 12, 793 (1968) [12, 911 (1967)]

BOIKO, E. B.
Ternary Compounds in the Zr–H–C and Zr–H–N Systems. (E) R. A. Andrievskii, E. B. Boiko, and V. P. Kalinin. 12, 930 (1968) [12, 1068 (1967)]

BOKSHA, O. N.
The Absorption Spectrum of Chrome-Diopside. (E) S. V. Grum-Grzhimailo, O. N. Boksha, and T. M. Varina. 12, 935 (1968) [12, 1073 (1967)]

BORDOVSKII, G. A.
Polymorphism of Lead Oxide Single Crystals. (E) G. A. Bordovskii and V. A. Izvozchikov. 12, 818 (1968) [12, 940 (1967)]

BORISOV, S. V.
The Garnet Pattern in the Structure of Iron Molybdate. (T/E) L. M. Plyasova, S. V. Borisov, and N. V. Belov. 12, 25 (1967) [12, 33 (1967)]
A New Structural Type in the Molybdates and Tungstates of Trivalent Metals. (E) L. M. Plyasova, R. F. Klevtsova, S. V. Borisov, and L. M. Kefeli. 12, 816 (1968) [12, 939 (1967)]

BORISOVA, N. M.
Application of Ultrathin Sections in the Electron Microscope Examination of Minerals. (E) G. I. Distler, R. V. Boyarskaya, and N. M. Borisova. 12, 329 (1967) [12, 378 (1967)]

BOROVIK-ROMANOV, A. S.
Synthesis of Octavite Crystals and Observation of the EPR Spectra of Co^{+2} Ions in Them. (E) A. S. Borovik-Romanov, N. Yu. Ikornikova, V. F. Meshcheryakov, and E. G. Rudashevskii. 12, 417 (1967) [12, 488 (1967)]

BOROVINSKII, L. A.
Growth Theory of Crystals Having a Diamond Lattice from the Gaseous Phase by Formation of Two-Dimensional Nuclei. (T) L. A. Borovinskii and R. P. Vorontsova. 12, 505 (1968) [12, 575 (1967)]

BOYARSKAYA, R. V.
Application of Ultrathin Sections in the Electron Microscope Examination of Minerals. (E) G. I. Distler, R. V. Boyarskaya, and N. M. Borisova. 12, 329 (1967) [12, 378 (1967)]

BRUSENTSEV, F. A.
Convergence Problems in Crystal Structure Refinement by the Least Squares Method. (E/T) R. A. Brusentsev. 12, 337 (1967) [12, 389 (1967)]
Program for Calculation of Interplanar Spacings in the ALGOL-60 Language. (E) F. A. Brusentsev and A. N. Rebenko. 12, 434 (1967) [12, 510 (1967)]

BUBELEVA, L. V.
Determination of Elementary Fiber Dimensions in Chrysotile Asbestos. (E/T) D. M. Kheiker, I. M. Plantsbaum, and L. V. Bubeleva. 12, 370 (1967) [12, 430 (1967)]

BUBLIK, A. I.
Structure of Germanium Thin Films. (E) A. I. Bublik. 12, 640 (1968) [12, 730 (1967)]

BUINOV, N. N.
Structure of Al–Cu–Mg Alloy in the Initial Stages of Aging. (E) T. V. Shchegoleva and N. N. Buinov. 12, 552 (1968) [12, 635 (1967)]

BURAKOVA, T. N.
Optical Study of the Phase Composition of Barium Titanate with Small Additions of Chromium Oxide. (E) T. N. Verbitskaya and T. N. Burakova. 12, 375 (1967) [12, 436 (1967)]

BURDINA, V. I.
Calculation of Complex Distributions and Weighted Projections of the Electron Density. (T) V. I. Burdina. 12, 192 (1967) [12, 230 (1967)]

BUTMAN, L. A.
A Program for Obtaining a Set of Integrated Intensities with a Nonautomatic X-Ray Diffractometer. (T) É. L. Lube, L. A. Butman, and D. M. Kheiker. 12, 614 (1968) [12, 710 (1967)]

BUTORIN, P. P.
Artificial Twinning in Synthetic Quartz Crystals. (E) V. T. Ushakovskii, K. F. Kashkurov, A. V. Simonov, and P. P. Butorin. 12, 954 (1968) [12, 1087 (1967)]

BYKOV, V. N.
Helium Cryostat for a Neutron Diffractometer. (E) V. S. Golovkin, V. N. Bykov, N. V. Khoteev, and V. A. Levdik. 12, 477 (1967) [12, 542 (1967)]

BYKHOVSKII, A. I.
Growth Mechanism of α-Modification Centers in High-Purity Tin. (E/T) A. I. Bykhovskii, L. N. Larikov, and V. M. Fal'chenko. 12, 460 (1967) [12, 528 (1967)]

BYSTROVA, T. G.
Debye Temperatures for Hexagonal Crystals. (T) T. G. Bystrova and F. I. Fedorov. 12, 9 (1967) [12, 11 (1967)]
Debye Temperatures of Tetragonal and Trigonal Crystals. (T/E) T. G. Bystrova and F. I. Fedorov. 12, 493 (1968) [12, 560 (1967)]

CHAIKOVSKII, V. M.
Study of the Structure of Nematic p-Azoxyanisole in Magnetic Fields. (E) I. G. Chistyakov and V. M. Chaikovskii. 12, 770 (1968) [12, 883 (1967)]

CHAPLYGIN, G. V.
Some Aspects of the Growth of Epitaxial Germanium Films by the Sandwich Method. (E/T) I. D. Voronova and G. V. Chaplygin. 12, 99 (1967) [12, 125 (1967)]

CHENTSOVA, L. G.
Anomalous Pleochroism in Synthetic Smoky Quartz Crystals. (E/T) L. I. Tsinober, M. I. Samoilovich, L. A. Gordienko, and L. G. Chentsova. 12, 53 (1967) [12, 65 (1967)]

CHERKASHIN, E. E.
New Compounds on the $MgZn_2$ Type in Systems of Rare-Earth Metals with Rhenium. (E) E. E. Cherkashin, M. Yu. Teslyuk, and D. P. Frankevich. 12, 617 (1968) [12, 712 (1967)]

CHERNOV, A. A.
Entrapment of an Impurity during the Movement of an Elementary Step. (T) V. V. Voronkov and A. A. Chernov. 12, 186 (1967) [12, 222 (1967)]

CHERNYSHEVA, T. F.
Method for the Selective Etching of Ammonium Dihydrogen Phosphate Crystals. (E) V. A. Meleshina, T. F. Chernysheva, and N. B. Russova. 12, 454 (1967) [12, 523 (1967)]

CHETKINA, L. A.
Crystalline and Molecular Structure of 1,5-Difluoroanthraquinone. (E) L. A. Chetkina. 12, 33 (1967) [12, 42 (1967)]
Least-Squares Refinement of the Crystal Structures of 1,5-Dibromo- and 1,5-Diiodoanthraquinone. (E) L. A. Chetkina and G. A. Gol'der. 12, 349 (1967) [12, 404 (1967)]

CHISTYAKOV, I. G.
Study of the Structure of Nematic p-Azoxyanisole in Magnetic Fields. (E) I. G. Chistyakov and V. M. Chaikovskii. 12, 770 (1968) [12, 883 (1967)]

CHISTYAKOV, Yu. D.
Heteroepitaxy of Molybdenum on Tungsten from the Liquid State. (E) Yu. D. Chistyakov, A. I. Pekarev, and M. V. Gartman. 12, 597 (1968) [12, 688 (1967)]

CHUKAL'SKII, E. N.
Characteristics of the Growth of Silicon Single Crystals from the Gas Phase. (T/E) I. V. Salli, É. S. Fal'kevich, Yu. S. Dement'ev, E. N. Chukal'skii, V. V. Belousova, and V. G. Khrebtishchev. 12, 425 (1967) [12, 499 (1967)]

DARINSKAYA, E. V.
Dislocation Structure of Decorated NaCl Crystals. (E) A. A. Predvoditelev, V. N. Rozhanskii, and E. V. Darinskaya. 12, 265 (1967) [12, 319 (1967)]

DATSENKO, L. I.
Study of X-Ray Diffraction Images of Some Dislocations Generated in the Plastic Deformation of Germanium. (E) L. I. Datsenko and M. Ya. Skorokhod. 12, 409 (1967) [12, 480 (1967)]

DEMENKOV
Production of Single Crystal Plates of Indium Antimonide by Crystallization of Droplets of the Melt in the Gap between Quartz Plates. (E) N. M. Demenkov and V. N. Maslov. 12, 650 (1968) [12, 737 (1967)]

DEMENT'EV, Yu. S.
Characteristics of the Growth of Silicon Single Crystals from the Gas Phase. (T/E) I. V. Salli, É. S. Fal'kevich, Yu. S. Dement'ev, E. N. Chukal'skii, V. V. Belousova, and V. G. Khrebtishchev. 12, 425 (1967) [12, 499 (1967)]

DEM'YANOV, É. A.
Epitaxial Growth of Germanium in the Open Iodide Process. (E) V. N. Kolesnikov, É. A. Dem'yanov, and L. I. Dereza. 12, 975 (1968) [12, 1105 (1967)]

DEREZA, L. I.
Epitaxial Growth of Germanium in the Open Iodide Process. (E) V. N. Kolesnikov, É. A. Dem'yanov, and L. I. Dereza. 12, 975 (1968) [12, 1105 (1967)]

DISTLER, G. I.
Application of Ultrathin Sections in the Electron Microscope Examination of Minerals. (E) G. I. Distler, R. V. Boyarskaya, and N. M. Borisova. 12, 329 (1967) [12, 378 (1967)]

DONIKA, F. G.
Crystal Structure of $Zn_3In_2S_6$. (E) F. G. Donika, G. A. Kiosse, S. I. Radautsan, S. A. Semiletov, and V. F. Zhitar'. 12, 745 (1968) [12, 854 (1967)]

DORNBERGER-SCHIFF, E. V.
Symmetry of Modification II of Gramicidin-C Hydrochloride Crystals. (T/E) E. V. Dornberger-Schiff and G. N. Tishchenko. 12, 301 (1967) [12, 355 (1967)]

DOVGOSHEI, N. I.
The Structure of $CdS_x \cdot CdSe_{1-x}$ Films. (E) N. I. Dovgoshei and I. A. Gryadil'. 12, 123 (1968) [12, 148 (1967)]

DUBOVKA, G. T.
The Possibility of the Existence of a Singular Triple Point on the Pressure–Temperature Diagram of an Iron–Rhodium Alloy. (E) E. G. Ponyatovskii, A. R. Kut-sar, and G. T. Dubovka. 12, 63 (1967) [12, 79 (1967)]

DUDKIN, L. D.
Anisotropy of Thermoelectric Properties in Chromium Disilicide and in Single Crystals of the Highest Silicide of Manganese. (E) B. K. Voronov, L. D. Dudkin, and N. N. Trusova. 12, 448 (1967) [12, 519 (1967)]

DUKOVA, E. D.
Influence of Some Crystal Defects on the Morphology of Its Growing Surface. I. Growth of a Mosaic Block Crystal on a Substrate. (E/T) E. D. Dukova. 12, 271 (1967) [12, 325 (1967)]
Influence of Some Crystal Defects on the Morphology of Its Growing Surface. II. Formation of Defects in the Growing over of Inclusions, and the Part Played by Block Boundaries at High Supersaturation. (E/T) E. D. Dukova. 12, 413 (1967) [12, 483 (1967)]

DVORYANKIN, V. F.
A Criterion for the Applicability of the Born Approximation to Electron-Diffraction Structural Studies. (T) V. F. Dvoryankin, A. Yu. Mityagin, and S. A. Akhundov. 12, 509 (1968) [12, 579 (1967)]
Some Problems in the Geometry of Diffraction Patterns from Slow Electrons. (T/E) V. F. Dvoryankin and A. Yu. Mityagin. 12, 845 (1968) [12, 966 (1967)]
Diffraction of Slow Electrons: A Method of Studying the Atomic Structure of Surfaces. (R) V. F. Dvoryankin and A. Yu. Mityagin. 12, 982 (1968) [12, 1112 (1967)]

D'YAKON, I. A.
Electron Diffraction Determination of the Structure for the Lamellar Copper Glycinate Monohydrate Phase. (E) B. K. Vainshtein, I. A. D'yakon, and A. V. Ablov. 12, 299 (1967) [12, 354 (1967)]

ÉDEL'MAN, F. L.
Effects of Electron and γ-Ray Bombardment on the Microhardness of Germanium. (E) V. V. Khainovskaya, F. L. Édel'man, and L. S. Smirnov. 12, 950 (1968) [12, 1085 (1967)]

EGOROV-TISMENKO, Yu. K.
Crystal Structure of $SrMoO_4$. (E) Yu. K. Egorov-Tismenko, M. A. Simonov, and N. V. Belov. 12, 436 (1967) [12, 511 (1967)]

ESIN, V. O.
Determination of Patterns of Macromosaic Substructure in Metal Single Crystals by X-Ray Diffraction Microscopy. (E) V. O. Esin and T. V. Ushkova. 12, 108 (1967) [12, 136 (1967)]

FAL'CHENKO, V. M.
Growth Mechanism of α-Modification Centers in High-Purity Tin. (E/T) A. I. Bykhovskii, L. N. Larikov, and V. M. Fal'chenko. 12, 460 (1967) [12, 528 (1967)]

FAL'KEVICH, É. S.
Characteristics of the Growth of Silicon Single Crystals from the Gas Phase. (T/E) I. V. Salli, É. S. Fal'kevich, Yu. S. Dement'ev, E. N. Chukal'skii, V. V. Belousova, and V. G. Khrebtishchev. 12, 425 (1967) [12, 499 (1967)]

FEDOROV, F. I.
Debye Temperatures for Hexagonal Crystals. (T) T. G. Bystrova and F. I. Fedorov. 12, 9 (1967) [12, 11 (1967)]
Some General Properties of the Nonlinear Polarizability Tensor of Crystals. (T) F. I. Fedorov. 12, 233 (1967) [12, 281 (1967)]
Debye Temperatures of Tetragonal and Trigonal Crystals. (T/E) T. G. Bystrova and F. I. Fedorov. 12, 493 (1968) [12, 560 (1967)]

FEIGIN, L. A.
The Absolute Intensity of Small Angle X-Ray Scattering in Apparatus Employing Slit Collimation, and the Calculation of the Molecular Weights of Macromolecules. (E/T) L. A. Feigin. 12, 228 (1967) [12, 274 (1967)]

FEL'DMAN, É. P.
Dislocation and Linear Change Fields in Piezoelectric Crystals. (T) A. M. Kosevich, L. A. Pastur, and É. P. Fel'dman. 12, 797 (1968) [12, 916 (1967)]

FIRSOVA, M. M.
Growth of Hexagonal Zinc Sulfide and Investigation of Some of its Physical Properties. (E) V. G. Zubov, L. A. Sysoev, and M. M. Firsova. 12, 87 (1967) [12, 84 (1967)]
Electric Conductivity of Quartz in an Alternating Electric Field. (E) T. M. Glushkova and M. M. Firsova. 12, 871 (1968) [12, 1000 (1967)]

FLANTSBAUM, I. M.
Determination of Elementary Fiber Dimensions in Chrysotile Asbestos. (E/T) D. M. Kheiker, I. M. Flantsbaum, and L. V. Bubeleva. 12, 370 (1967) [12, 430 (1967)]

FOMIN, V. G.
X-Ray Investigation of Some Peculiarities of the Impurity Distribution in Strongly-Doped Silicon Single Crystals. (E) V. G. Fomin and M. G. Mil'vidskii. 12, 955 (1968) [12, 1089 (1967)]

FOTCHENKOV, A. A.
Measurement of Some Electrostriction Coefficients for Ammonium Dihydrogen Phosphate. (E) M. P. Zaitseva and A. A. Fotchenkov. 12, 623 (1968) [12, 716 (1967)]

FRANKEVICH, D. P.
New Compounds of the $MgZn_2$ Type in Systems of Rare-Earth Metals with Rhenium. (E) E. E. Cherkashin, M. Yu. Teslyuk, and D. P. Frankevich. 12, 617 (1968) [12, 712 (1967)]

FUKS, M. Ya.
Effect of Annealing on the Properties of the Mosaic Structure of Al and Sn Vacuum Condensates. (E) L. S. Palatnik, M. Ya. Fuks, B. T. Boiko, and P. A. Panchekha. 12, 793 (1968) [12, 911 (1967)]

GABUDA, S. P.
Nuclear Magnetic Resonance in Sodium Hydroselenite Single Crystals. (E) G. V. Gavrilova-Podol'skaya, S. P. Gabuda, and A. G. Lundin. 12, 114 (1967) [12, 141 (1967)]

GALKIN, B. D.
Electron-Diffraction Investigation of Thin CdS Films. (E) B. D. Galkin, N. V. Troitskaya, and R. D. Ivanov. 12, 766 (1968) [12, 878 (1967)]

GALYARSKII, É. I.
Conical Groups of Similarity Symmetry and of Antisymmetry of a Different Kind. (T) É. I. Galyarskii. 12, 169 (1967) [12, 202 (1967)]

GARTMAN, M. V.
Heteroepitaxy of Molybdenum on Tungsten from the Liquid State. (E) Yu. D. Chistyakov, A. I. Pekarev, and M. V. Gartman. 12, 597 (1968) [12, 688 (1967)]

GAVRILOV, P. I.
X-Ray Phase Analysis of the Erbium-Hydrogen System. (E) Z. M. Azarkh and P. I. Gavrilov. 12, 932 (1968) [12, 1070 (1967)]

GAVRILOVA-PODOL'SKAYA, G. V.
Nuclear Magnetic Resonance in Sodium Hydroselenite Single Crystals. (E) G. V. Gavrilova-Podol'skaya, S. P. Gabuda, and A. G. Lundin. 12, 114 (1967) [12, 141 (1967)]

GEKTINA, I. V.
Electron-Diffraction Study of Surface Diffusion in the Copper–Nickel and Copper–Silver Systems. (E) B. Ya. Pines, I. P. Grebennik, and I. V. Gektina. 12, 556 (1968) [12, 639 (1967)]

GENINA, M. A.
Conoscopy of Elongated Capron Monofilaments. (E) M. A. Genina and N. Ya. Onishchenko. 12, 475 (1967) [12, 540 (1967)]

GERASIMENKO, V. S.
Theory of a Method of Experimentally Determining the Growth Rate of Metallic Crystals as a Function of Supercooling. (T/E) V. S. Gerasimenko and B. Ya. Lyubov. 12, 734 (1968) [12, 840 (1967)]

GERKEN, V. A.
Ferroelectric Response of Tetramethylammonium Trilodomercurate. (E) V. A. Gerken, V. I. Pakhomov, A. S. Sonin, E. I. Marchenko, and V. N. Nepomnyashchaya. 12, 531 (1968) [12, 607 (1967)]

GEVELING, N. N.
Substructure of Single Crystals of a Cobalt–Iron Alloy. (E) V. P. Ovcharov, N. N. Geveling, and V. P. Makarov. 12, 652 (1968) [12, 738 (1967)]

GLADKII, V. V.
Elastic, Piezoelectric, and Pyroelectric Properties of Barium Nitrite Single Crystals. (E) V. V. Gladkii and I. S. Zheludev. 12, 788 (1968) [12, 905 (1967)]

GLADKIKH, N. T.
Growth of Strip and Whisker Crystals of Cadmium Sulfide. (E) L. S. Palatnik, M. N. Naboka, and N. T. Gladkikh. 12, 594 (1968) [12, 684 (1967)]

GLADYSHEVSKII, E. I.
W_6Fe_7-Type Compounds in the Nb–Fe, Ta–Fe, and Ta–Co Systems. (E) P. I. Kripyakevich, E. I. Gladyshevskii, and R. V. Skolozdra. 12, 525 (1968) [12, 600 (1967)]
Orthorhombic Modifications of the Compounds W_2C and Mo_2C. (E) V. S. Telegus, E. I. Gladyshevskii, and P. I. Kripyakevich. 12, 813 (1968) [12, 936 (1967)]

GLAZYRIN, M. P.
Crystallo-Optical Properties of Vanadates of Alkali Metals of the MeV_3O_8 Type. (E) M. P. Glazyrin. 12, 444 (1967) [12, 516 (1967)]

GLUSHKOVA, T. M.
Electric Conductivity of Quartz in an Alternating Electric Field. (E) T. M. Glushkova and M. M. Firsova. 12, 871 (1968) [12, 1000 (1967)]

GOL'DER, G. A.
Least-Squares Refinement of the Crystal Structures of 1,5-Dibromo- and 1,5-Diiodoanthraquinone. (E) L. A. Chetkina and G. A. Gol'der. 12, 349 (1967) [12, 404 (1967)]

GOLOVKIN, V. S.
Helium Cryostat for a Neutron Diffractometer. (E) V. S. Golovkin, V. N. Bykov, N. V. Khoteev, and V. A. Levdik. 12, 477 (1967) [12, 542 (1967)]

GORBACH, S. S.
Some Physical Properties of Deuterated Potassium Dihydrogen Phosphate Single Crystals in the Paraelectric Phase. (E) A. S. Vasilevskaya, S. S. Gorbach, M. F. Koldobskaya, L. I. Kuznetsova, L. G. Lomova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 308 (1967) [12, 361 (1967)]

GORBACHEV, V. V.
A Small Crystal Neutron Spectrometer for Studies on Crystal Dynamics. (E) V. V. Gorbachev and V. I. Platonov. 12, 978 (1968) [12, 1108 (1967)]

GORDEEVA, N. V.
Coarsening of the Grains of Powdered Rochelle Salt in Its Own Solution Due to Temperature Fluctuations. (E) N. V. Gordeeva and A. V. Shubnikov. 12, 154 (1967) [12, 186 (1967)]

GORDIENKO, L. A.
Anomalous Pleochroism in Synthetic Smoky Quartz Crystals. (E/T) L. I. Tsinober, M. I. Samoilovich, L. A. Gordienko, and L. G. Chentsova. 12, 53 (1967) [12, 65 (1967)]

GORSKII, F. K.
Determination of the Interfacial Energy at the Boundary between the Solid and Liquid-Crystal Phases of Para-Azoxyanisole and Cholesteryl Caprinate. (E/T) F. K. Gorskii and N. M. Sakevich. 12, 586 (1968) [12, 674 (1967)]

GRDINA, Yu. V.
Healing of Cracks in Rock Salt Crystals. (E) Yu. V. Grdina and V. V. Neverov. 12, 421 (1967) [12, 493 (1967)]

GREBENKO, A. I.
Crystallographic Study of the Iodohydrate of Gramicidine C. (E) G. N. Tishchenko, K. A. Zykalova, and A. I. Grebenko. 12, 758 (1968) [12, 868 (1967)]

GREBENNIK, I. P.
Electron-Diffraction Study of Surface Diffusion in the Copper–Nickel and Copper–Silver Systems. (E) B. Ya. Pines, I. P. Grebennik, and I. V. Gektina. 12, 556 (1968) [12, 639 (1967)]

GRIGAS, A. P.
Phase Transformation in the High-Resistance Semiconductor Sb_2S_3. (E) A. P. Grigas and A. S. Karpus. 12, 627 (1968) [12, 719 (1967)]

GRUM-GRZHIMAILO, S. V.
Color of Synthetic Tourmaline Crystals Containing Iron. (E) I. E. Voskresenskaya and S. V. Grum-Grzhimailo. 12, 311 (1967) [12, 363 (1967)]
The Absorption Spectrum of Chrome-Diopside. (E) S. V. Grum-Grzhimailo, O. N. Boksha, and T. M. Varina. 12, 935 (1968) [12, 1073 (1967)]

GRYADIL', I. A.
The Structure of $CdS_x \cdot CdSe_{1-x}$ Films. (E) N. I. Dovgoshei and I. A. Gryadil'. 12, 123 (1967) [12, 148 (1967)]

GULYAEV, A. M.
Crystal Structure and Electrical Properties of Indium Antimonide Films Deposited by the Three-Temperature Method. (E) K. V. Shalimova, A. M. Gulyaev, and S. A. Inozemtsev. 12, 569 (1968) [12, 653 (1967)]

GUMANSKII, G. A.
Effect of X Rays on the Growth of $CuSO_4$ Crystals from Aqueous Solution. (E) Ya. S. Abdullaeva and G. A. Gumanskii. 12, 967 (1968) [12, 1099 (1967)]

GUREVICH, É. N.
An Automatic Equiinclination Diffractometer for Single Crystals. (E) D. M. Kheiker, É. L. Lube, A. V. Mirenskii, N. I. Komyak, O. V. Maklakov, L. Z. Tatkin, É. N. Gurevich, and V. S. Rogachev. 12, 802 (1968) [12, 924 (1967)]

GURSKAYA, G. V.
The Crystal Structure of Catalase. (E) B. K. Vainshtein, V. V. Barynin, G. V. Gurskaya, and V. Ya. Nikitin. 12, 750 (1968) [12, 860 (1967)]

GUSATINSKII, A. N.
Atomic Scattering Factors for X Rays and Effective Charges of Atoms in Semiconductors of Type $A^{III}B^{V}$. (T) R. I. Anishchenko and A. N. Gusatinskii. 12, 440 (1967) [12, 514 (1967)]

IKORNIKOVA, N. Yu.
Synthesis of Otavite Crystals and Observation of the EPR Spectra of Co^{+2} Ions in Them. (E) A. S. Borovik-Romanov, N. Yu. Ikornikova, V. F. Meshcheryakov, and E. G. Rudashevskii. 12, 417 (1967) [12, 488 (1967)]

ILYUKHIN, V. Y.
Crystal Structure of Thorolite, $Sn(Ta, Nb)_2O_7$. (E) N. V. Maksimova and V. V. Ilyukhin. 12, 105 (1967) [12, 133 (1967)]

INDENBOM, V. L.
Solution of Three-Dimensional Field Anisotropy Problems Using Rectilinear Generators. (T) V. L. Indenbom and S. S. Orlov. 12, 849 (1968) [12, 971 (1967)]

INOZEMTSEV, S. A.
Crystal Structure and Electrical Properties of Indium Antimonide Films Deposited by the Three-Temperature Method. (E) K. V. Shalimova, A. M. Gulyaev, and S. A. Inozemtsev. 12, 569 (1968) [12, 653 (1967)]

IOSILEVSKII, Ya. A.
Elastic Waves in Crystals of Cubic and Tetragonal Symmetry. (T) Ya. A. Iosilevskii. 12, 57 (1967) [12, 70 (1967)]

ISMAILZADE, I. G.
X-Ray and Electrical Studies of the System $Bi_4Ti_3O_{12}$–$BiFeO_3$. (E) I. G. Ismailzade, V. I. Nesterenko, F. A. Mirishli, and P. G. Rustamov. 12, 400 (1967) [12, 468 (1967)]
A Method for Finding the Curie Temperature and Measuring the Temperature Dependence of the Dielectric Susceptibility of Ferroelectrics and Antiferroelectrics with High Electrical Conductivity. (E) I. G. Ismailzade and V. I. Nesterenko. 12, 625 (1968) [12, 717 (1967)]

IVANOV, A. T.
Elasticity of Quartz Irradiated with Fast Neutrons. (E) V. G. Zubov and A. T. Ivanov. 12, 313 (1967) [12, 365 (1967)]

IVANOV, N. R.
$KH_3(SeO_3)_2$ Crystal, a New Representative of the Hydroselenite Family. Dielectric Anomalies and Twinned Structure. (E/T) L. A. Shuvalov, N. R. Ivanov, and T. K. Sitnik. 12, 315 (1967) [12, 366 (1967)]

IVANOV, R. D.
Electron-Diffraction Investigation of Thin CdS Films. (E) B. D. Galkin, N. V. Troitskaya, and R. D. Ivanov. 12, 766 (1968) [12, 878 (1967)]

IVANOVA, N. S.
Crystal Structure of Zinc and Lead Diethyldithiocarbamates. (E) Z. V. Zvonkova, A. N. Khvatkina, and N. S. Ivanova. 12, 926 (1968) [12, 1065 (1967)]

IVERONOVA, V. I.
Effect of Temperature on Thermal Diffuse Scattering in Polycrystalline Al and Cu. (E) V. I. Iveronova, A. A. Katsnel'son, I. I. Popova, and S. V. Sveshnikov. 12, 775 (1968) [12, 888 (1967)]

IZVOZCHIKOV, V. A.
Polymorphism of Lead Oxide Single Crystals. (E) G. A. Bordovskii and V. A. Izvozchikov. 12, 818 (1968) [12, 940 (1967)]

JOSHI, M. S.
Application of the Selective Etch Method in the Study of Structural Defects in Synthetic Quartz. (E) M. S. Joshi and A. S. Vag. 12, 573 (1968) [12, 656 (1967)]

KALININ, V. P.
Ternary Compounds in the Zr–H–C and Zr–H–N Systems. (E) R. A. Andrievskii, E. B. Boiko, and V. P. Kalinin. 12, 930 (1968) [12, 1068 (1967)]

KALINKIN, I. P.
Preparation, Structure, and Some Photoelectric Properties of Single- and Multilayer Monocrystalline Chalcogenide Films of the Types $A^{II}B^{VI}$ and $A^{IV}B^{VI}$. (E) L. A. Sergeeva, I. P. Kalinkin, and V. B. Aleskovskii. 12, 90 (1967) [12, 113 (1967)]

KAMENETSKAYA, D. S.
Nucleus Formation in the Crystallization of Two-Component Liquids. (T) D. S. Kamenetskaya. 12, 71 (1967) [12, 90 (1967)]

KAMINSKII, A. A.
A Continuous Laser Based on $Y_3Al_5O_{12}$–Nd^{3+} and Working at 300°K. (E) Kh. S. Bagdasarov, F. M. Zubkova, A. A. Kaminskii, A. M. Kevorkov, and V. Ya. Khaimov-Mal'kov. 12, 304 (1967) [12, 358 (1967)]

KAPUSTIN, A. P.
Effect of Temperature on the Scattering of Light by Liquid Crystals of the Cholesteral Type. (E) A. P. Kapustin. 12, 443 (1967) [12, 516 (1967)]

KAPUSTINA, M. D.
Nuclear Magnetic Resonance Study of Ruby Single Crystals. (E) V. S. Pavlovskaya, V. F. Belov, M. D. Kapustina, A. N. Asabin, and V. Ya. Khaimov-Mal'kov. 12, 41 (1967) [12, 51 (1967)]

KARAUL'NIK, A. E.
Optimum Conditions for Excitation of the Inverse Piezoelectric Effect in Crystals. (T/E) A. E. Karaul'nik, I. S. Zheludev, and M. I. Yaroslavskii. 12, 262 (1967) [12, 314 (1967)]

KARPUS, A. S.
Phase Transformation in the High-Resistance Semiconductor Sb_2S_3. (E) A. P. Grigas and A. S. Karpus. 12, 627 (1968) [12, 719 (1967)]

KASATKIN, A. P.
Epitaxy of Ice on Sodium Bromate Crystals. (E) T. G. Petrov and A. P. Kasatkin. 12, 647 (1968) [12, 735 (1967)]
Growth of Acetoxime Single Crystals. (E) A. P. Kasatkin. 12, 840 (1968) [12, 959 (1967)]

KASHAEV, A. A.
The Crystal Structure of Pyrosmalite. (E) A. A. Kashaev. 12, 923 (1968) [12, 1062 (1967)]

KASHKUROV, K. F.
Growth of Large Corundum Crystals by the Hydrothermal Method. (E) K. F. Kashkurov, P. I. Nikitichev, V. V. Osipov, L. D. Sizova, and A. V. Simonov. 12, 837 (1968) [12, 956 (1967)]
Artificial Twinning in Synthetic Quartz Crystals. (E) V. T. Ushakovskii, K. F. Kashkurov, A. V. Simonov, and P. P. Butorin. 12, 954 (1968) [12, 1087 (1967)]

KATSNEL'SON, A. A.
Effect of Temperature on Thermal Diffuse Scattering in Polycrystalline Al and Cu. (E) V. I. Iveronova, A. A. Katsnel'son, I. I. Popova, and S. V. Sveshnikov. 12, 775 (1968) [12, 888 (1967)]

KEFELI, L. M.
A New Structural Type in the Molybdates and Tungstates of Trivalent Metals. (E) L. M. Plyasova, R. F. Klevtsova, S. V. Borisov, and L. M. Kefeli. 12, 816 (1968) [12, 939 (1967)]

KHAIMOV-MALKOV, V. Ya.
A Continuous Laser Based on $Y_3Al_5O_{12}$–Nd^{3+} and Working at 300°K. (E) Kh. S. Bagdasarov, F. M. Zubkova, A. A. Kaminskii, A. M. Kevorkov, and V. Ya. Khaimov-Mal'kov. 12, 304 (1967) [12, 358 (1967)]
Nuclear Magnetic Resonance Study of Ruby Single Crystals. (E) V. S. Pavlovskaya, V. F. Belov, M. D. Kapustina, A. N. Asabin, and V. Ya. Khaimov-Mal'kov. 12, 41 (1967) [12, 51 (1967)]
Influence of Block Structure and Slip Planes on the Divergence of the Laser Radiation of Ruby Crystals. (E/T) E. M. Akulenok, Kh. S. Bagdasarov, V. S. Papkov, and V. Ya. Khaimov-Mal'kov. 12, 237 (1967) [12, 286 (1967)]
A Continuous Laser Based on $Y_3Al_5O_{12}$–Nd^{3+} and Working at 300°K. (E) Kh. S. Bagdasarov, F. M. Zubkova, A. A. Kaminskii, A. M. Kevorkov, and V. Ya. Khaimov-Mal'kov. 12, 304 (1967) [12, 358 (1967)]

KHAINOVSKAYA, V. V.
Effects of Electron and γ-Ray Bombardment on the Microhardness of Germanium. (E) V. V. Khainovskaya, F. L. Édel'man, and L. S. Smirnov. 12, 950 (1968) [12, 1085 (1967)]

KHANONKIN, A. A.
Studies of the Subgrain Structure of Curved Aluminum Crystal Analyzers of X-Ray Spectrographs. (E) I. B. Staryi and A. A. Khanonkin. 12, 633 (1968) [12, 724 (1967)]

KHARCHENKO, L. Yu.
Hydrothermal Synthesis of Some Double Lithium-Rare Earth Tungstate Crystals. (E) L. Yu. Kharchenko and P. V. Klevtsov. 12, 965 (1968) [12, 1097 (1967)]

KHARITONOV, Yu. A.
The Simplest Laminar Silicates in Terms of Shubnikov (Anti) Symmetry Groups. (T) N. V. Belov and Yu. A. Kharitonov. 12, 196 (1967) [12, 235 (1967)]

KHAR'KOVA, G. V.
Use of Unsymmetrical Photographs to Investigate Dislocations in Germanium by the Borrmann Method. (E) L. V. Tikhonov and G. V. Khar'kova. 12, 951 (1968) [12, 1086 (1967)]

KHAR'YUZOV, I. G.
Reflection Coefficient of Iodine Vapor from Single-Crystal Germanium. (E) I. G. Khar'yuzov and G. A. Kurov. 12, 825 (1968) [12, 947 (1967)]

KHEIKER, D. M.
Determination of Elementary Fiber Dimensions in Chrysotile Asbestos. (E/T) D. M. Kheiker, I. M. Plantsbaum, and L. V. Bubeleva. 12, 370 (1967) [12, 430 (1967)]
A Program for Obtaining a Set of Integrated Intensities with a Nonautomatic X-Ray Diffractometer. (T) É. L. Lube, L. A. Butman, and D. M. Kheiker. 12, 614 (1968) [12, 710 (1967)]
An Automatic Equiinclination Diffractometer for Single Crystals. (E) D. M. Kheiker, É. L. Lube, A. V. Mirenskii, N. I. Komyak, O. V. Maklakov, L. Z. Tatkin, É. N. Gurevich, and V. S. Rogachev. 12, 802 (1968) [12, 924 (1967)]

KHITROVA, V. I.
Electron-Diffraction Study of Tantalum Dioxide in Thin Films. (E) V. I. Khitrova, V. V. Klechkovskaya, and Z. G. Pinsker. 12, 907 (1968) [12, 1044 (1967)]

KHOLMYANSKII, V. A.
Structure of Ultrathin Films Produced by Vacuum Evaporation of Tantalum and Iridium. (E) D. I. Lainer and V. A. Kholmyanskii. 12, 913 (1968) [12, 1051 (1967)]

KHOTEEV, N. V.
Helium Cryostat for a Neutron Diffractometer. (E) V. S. Golovkin, V. N. Bykov, N. V. Khoteev, and V. A. Levdik. 12, 477 (1967) [12, 542 (1967)]

KHOTSYANOVA, T. L.
Phase Transitions in Molecular Crystals of C_6Cl_5F and C_6Br_5F. (E) T. A. Babushkina, V. M. Kozhin, V. I. Robas, I. A. Safin, G. K. Semin, and T. L. Khotsyanova. 12, 116 (1967) [12, 143 (1967)]

KHREBTISHCHEV, V. G.
Characteristics of the Growth of Silicon Single Crystals from the Gas Phase. (T/E) I. V. Salli, É. S. Fal'kevich, Yu. S. Dement'ev, E. N. Chukal'skii, V. V. Belousova, and V. G. Khrebtishchev. 12, 425 (1967) [12, 499 (1967)]

KHVATKINA, A. N.
Crystal Structure of Zinc and Lead Diethyldithiocarbamates. (E) Z. V. Zvonkova, A. N. Khvatkina, and N. S. Ivanova. 12, 926 (1968) [12, 1065 (1967)]

KIOSSE, G. A.
Crystal Structure of $Zn_4In_2S_7$. (E) F. G. Donika, G. A. Kiosse, S. I. Radautsan, S. A. Semiletov, and V. F. Zhitar'. 12, 745 (1968) [12, 854 (1967)]

KISELEV, D. F.
Frequency Dependence of the Intensity of Raman Scattering in α-Quartz. (E) D. F. Kiselev. 12, 936 (1968) [12, 1073 (1967)]

KITAIGORODSKII, A. I.
Temperature Dependence of the Generalized Grüneisen Tensor for an Organic Crystal. (T/E) A. I. Kitaigorodskii, B. D. Koreshkov, and V. F. Teslenko. 12, 292 (1967) [12, 349 (1967)]
Studies on Organic Chemical Crystallography in the USSR. (R) A. I. Kitaigorodskii. 12, 692 (1968) [12, 786 (1967)]
Phase Diagram of the Biphenyl – α,α'-Dipyridyl System. (E) S. A. Remyga, R. M. Myasnikova, and A. I. Kitaigorodskii. 12, 784 (1968) [12, 900 (1967)]

KLECHKOVSKAYA, V. V.
Electron-Diffraction Study of Tantalum Dioxide in Thin Films. (E) V. I. Khitrova, V. V. Klechkovskaya, and Z. G. Pinsker. 12, 907 (1968) [12, 1044 (1967)]

KLEIN, G. A.
Surface Structure of Negative Crystals (Pores) in Molybdenum. (E) G. A. Klein and V. A. Krakhmalev. 12, 964 (1968) [12, 1096 (1967)]

KLESHCHEV, G. V.
Graphical Method of Plotting Regions of Diffuse Scattering. (T) G. V. Kleshchev and A. I. Sheinkman. 12, 903 (1968) [12, 1039 (1967)]

KLEVTSOV, P. V.
Hydrothermal Synthesis of Some Double Lithium-Rare Earth Tungstate Crystals. (E) L. Yu. Kharchenko and P. V. Klevtsov. 12, 965 (1968) [12, 1097 (1967)]

KLEVTSOVA, R. F.
A New Structural Type in the Molybdates and Tungstates of Trivalent Metals. (E) L. M. Plyasova, R. F. Klevtsova, S. V. Borisov, and L. M. Kefeli. 12, 816 (1968) [12, 939 (1967)]

KOLDOBSKAYA, M. F.
Some Physical Properties of Deuterated Potassium Dihydrogen Phosphate Single Crystals in the Paraelectric Phase. (E) A. S. Vasilevskaya, S. S. Gorbach, M. F. Koldobskaya, L. I. Kuznetsova, L. G. Lomova, T. A. Regul'skaya, I.S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 308 (1967) [12, 361 (1967)]
Some Physical Properties of Rubidium Dihydrogen Phosphate Single Crystals. (E) A. S. Vasilevskaya, M. F. Koldobskaya, L. G. Lomova, V. P. Popova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, S. S. Sonin, and V. S. Suvorov. 12, 383 (1967) [12, 447 (1967)]

KOLESNIKOV, V. N.
Epitaxial Growth of Germanium in the Open Iodide Process. (E) V. N. Kolesnikov, É. A. Dem'yanov, and L. I. Dereza. 12, 975 (1968) [12, 1105 (1967)]

KOLOMIETS, L. D.
Structure of Uranium in Thin Films. (E) L. D. Kolomiets. 12, 132 (1967) [12, 154 (1967)]

KOMYAK, N. I.
An Automatic Equiinclination Diffractometer for Single Crystals. (E) D. M. Kheiker, É. L. Lube, A. V. Mirenskii, N. I. Komyak, O. V. Maklakov, L. Z. Tatkin, É. N. Gurevich, and V. S. Rogachev. 12, 802 (1968) [12, 924 (1967)]

KONDRASHEV, Yu. D.
Crystal Structure of the Modifications of p-Bromodiazoaniline. (E) Yu. A. Omel'chenko and Yu. D. Kondrashev. 12, 359 (1967) [12, 416 (1967)]

KOPTSIK, V. A.
Nonlinear Optical Properties of Single Crystals of Deuterated Ammonium Dihydrogen Phosphate. (E) A. S. Vasilevskaya, E. N. Volkova, V. A. Koptsik, L. N. Rashkovich, T. A. Regul'skaya, I. S. Rez, A. S. Sonin, and V. S. Suvorov. 12, 446 (1967) [12, 518 (1967)]
A General Sketch of the Development of the Theory of Symmetry and Its Applications in Physical Crystallography over the Last 50 Years. (R) V. A. Koptsik. 12, 667 (1968) [12, 755 (1967)]
Describing Three-Dimensional Periodic Magnetic Structures by Shubnikov Groups. (T) V. A. Koptsik. 12, 723 (1968) [12, 826 (1967)]

KORESHKOV, B. D.
Temperature Dependence of the Generalized Grüneisen Tensor for an Organic Crystal. (T/E) A. I. Kitaigorodskii, B. D. Koreshkov, and V. F. Teslenko. 12, 292 (1967) [12, 349 (1967)]

KORNEV, L. N.
Single-Crystal Layers of Germanium and Silicon, Prepared by Pyrolysis of Hydrides. (E) T. A. Zeveke, L. N. Kornev, and V. A. Tolomasov. 12, 919 (1968) [12, 1058 (1967)]

KOSEVICH, A. M.
Dislocation and Linear Charge Fields in Piezoelectric Crystals. (T) A. M. Kosevich, L. A. Pastur, and É. P. Fel'dman. 12, 797 (1968) [12, 916 (1967)]

KOSEVICH, V. M.
Growth Figures and Dislocations in Rock-Salt Single-Crystal Layers. (E) V. M. Kosevich, V. M. Moskalev, and L. S. Palatnik. 12, 581 (1968) [12, 667 (1967)]

KOTOVA, L. I.
Regarding the Determination of Block Size from Extinction Effects. (E) G. M. Vorob'ev and L. I. Kotova. 12, 548 (1968) [12, 631 (1967)]

KOVDA, A. V.
Preparation of GaAs Epitaxial Films by the Sandwich Method. (E) A. V. Kovda and S. A. Semiletov. 12, 468 (1967) [12, 535 (1967)]

KOZHIN, V. M.
Phase Transitions in Molecular Crystals of C_6Cl_5F and C_6Br_5F. (E) T. A. Babushkina, V. M. Kozhin, V. I. Robas, I. A. Safin, G. K. Semin, and T. L. Khotsyanova. 12, 116 (1967) [12, 143 (1967)]

The Thermal Expansion of Molecular Crystals. I. Calculation of the Expansion Tensor for Naphthalene over a Wide Temperature Range. (E) A. P. Ryzhenkov and V. M. Kozhin. 12, 943 (1968) [12, 1079 (1967)]

KOZLOV, O. M.
Calculating Extinction Effects. (T) A. V. Kuznetsov and O. M. Kozlov. 12, 540 (1968) [12, 620 (1967)]

Extinction Effects in Aluminum Single Crystals. (E) O. M. Kozlov and A. V. Kuznetsov. 12, 544 (1968) [12, 626 (1967)]

KOZLOVSKII, M. I.
Effect of a Steady Electric Field on Layer-Spiral Crystal Growth. (E) M. I. Kozlovskii. 12, 968 (1968) [12, 1099 (1967)]

KRAKHMALEV, V. A.
Surface Structure of Negative Crystals (Pores) in Molybdenum. (E) G. A. Klein and V. A. Krakhmalev. 12, 964 (1968) [12, 1096 (1967)]

KRALINA, A. A.
Structure Defects in Metal Single Crystals Grown from Melts. (E) A. A. Kralina. 12, 834 (1968) [12, 954 (1967)]

KRASNENKOVA, S. D.
Method for the Quantitative Evaluation of the Macroscopic Block Structure (Nonsingle-Crystallinity) of Corundum. (E) I. A. Bass and S. D. Krasnenkova. 12, 631 (1968) [12, 723 (1967)]

KREMENCHUGSKII, L. S.
Dynamic Measurement of the Pyroelectric Effect in TGS Crystals. (E) L. S. Kremenchugskii and V. B. Samoilov. 12, 940 (1968) [12, 1077 (1967)]

KRIPYAKEVICH, P. I.
RAl_3 Compounds in Rare Earth–Aluminum Systems and Their Crystal Structures. (E) I. I. Zalutskii and P. I. Kripyakevich. 12, 341 (1967) [12, 394 (1967)]

Crystalline Structures of Some Compounds in the Nb–Ni and Ta–Ni Systems. (E) P. I. Kripyakevich and E. N. Piyaeva. 12, 294 (1967) [12, 350 (1967)]

The Compound $LaCo_{13}$ and Its Crystal Structure. (E) O. S. Zarechnyuk and P. I. Kripyakevich. 12, 438 (1967) [12, 512 (1967)]

W_4Fe_7-Type Compounds in the Nb–Fe, Ta–Fe, and Ta–Co Systems. (E) P. I. Kripyakevich, E. I. Gladyshevskii, and R. V. Skolozdra. 12, 525 (1968) [12, 600 (1967)]

Orthorhombic Modifications of the Compounds W_2C and Mo_2C. (E) V. S. Telegus, E. I. Gladyshevskii, and P. I. Kripyakevich. 12, 813 (1968) [12, 936 (1967)]

KUDRYAVTSEVA, R. V.
Some Structural and Electrical Properties of Lead Sulfide Films. (E) R. V. Kudryavtseva, S. A. Semiletov, and G. I. Perevezentseva. 12, 86 (1967) [12, 109 (1967)]

Amorphization of Polycrystalline Germanium Films on Irradiation with Argon Ions. (E) P. V. Pavlov, D. I. Tetel'baum, E. I. Zorin, and R. V. Kudryavtseva. 12, 134 (1967) [12, 155 (1967)]

KURBATOV, B. S.
Etching Germanium with Iodine Vapor in an Electric Field. (E) G. A. Kurov and B. S. Kurbatov. 12, 125 (1967) [12, 149 (1967)]

Growth of Epitaxial Germanium Films by the Sandwich Method. (E) B. S. Kurbatov, E. V. Rakova, and G. A. Kurov. 12, 140 (1967) [12, 160 (1967)]

KURDYUMOVA, R. N.
Optical Properties of Silver Iodide Films. (E) R. N. Kurdyumova and D. T. Sviridov. 12, 643 (1968) [12, 733 (1967)]

KUROV, G. A.
Reflection Coefficient of Iodine Vapor from Single-Crystal Germanium. (E) I. G. Khar'yuzov and G. A. Kurov. 12, 825 (1968) [12, 947 (1967)]

KUSHNIR, I. P.
Movement of Dislocations in Iron Microcrystals. (E) I. P. Kushnir. 12, 405 (1967) [12, 474 (1967)]

KUT-SAR, A. R.
The Possibility of the Existence of a Singular Triple Point on the Pressure–Temperature Diagram of an Iron–Rhodium Alloy. (E) E. G. Ponyatovskii, A. R. Kut-sar, and G. T. Dubovka. 12, 63 (1967) [12, 79 (1967)]

KUZ'MA, Yu. B.
New Compounds with Structure of the Type $W_2Cr_{21}C_6$. (E) Yu. B. Kuz'ma and Yu. V. Voroshilov. 12, 297 (1967) [12, 353 (1967)]

KUZ'MINOV, Yu. S.
Determination of the Oxygen Parameter and Degree of Inversion of Manganese Vanadate by Neutron Diffraction. (E) Yu. S. Kuz'minov. 12, 811 (1968) [12, 935 (1967)]

KUZNETSOV, A. V.
Calculating Extinction Effects. (T) A. V. Kuznetsov and O. M. Kozlov. 12, 540 (1968) [12, 620 (1967)]

Extinction Effects in Aluminum Single Crystals. (E) O. M. Kozlov and A. V. Kuznetsov. 12, 544 (1968) [12, 626 (1967)]

KUZNETSOV, V. A.
Crystallization of Ruby under Hydrothermal Conditions. (E) V. A. Kuznetsov and A. A. Shternberg. 12, 280 (1967) [12, 336 (1967)]

Kinetics of Hydrothermal Crystallization of Corundum. II. Effect of Solvents on Crystallization. (E) V. A. Kuznetsov. 12, 608 (1968) [12, 702 (1967)]

Hydrothermal Synthesis of Potassium Niobate and Potassium Tantalate. (E) A. A. Shternberg, Ya. É. Lapsker, and V. A. Kuznetsov. 12, 838 (1968) [12, 957 (1967)]

KUZNETSOV, V. P.
Nature of the Acceptors and Carrier-Scattering Centers in Polycrystalline Germanium Films. (E) V. P. Kuznetsov. 12, 970 (1968) [12, 1101 (1967)]

KUZNETSOVA, L. I.
Some Physical Properties of Deuterated Potassium Dihydrogen Phosphate Single Crystals in the Paraelectric Phase. (E) A. S. Vasilevskaya, S. S. Gorbach, M. F. Koldobskaya, L. I. Kuznetsova, L. G. Lomova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suborov. 12, 308 (1967) [12, 361 (1967)]

LANIER, D. I.
Structure of Ultrathin Films Produced by Vacuum Evaporation of Tantalum and Iridium. (E) D. I. Lainer and V. A. Kholmyanskii. 12, 913 (1968) [12, 1051 (1967)]

LANGE, T. I.
Effect of Indium Impurity on the Crystallization Process of Selenium. (E) V. N. Lange, T. I. Lange, and V. A. Titov. 12, 456 (1967) [12, 525 (1967)]

LANGE, V. N.
Effect of Indium Impurity on the Crystallization Process of Selenium. (E) V. N. Lange, T. I. Lange, and V. A. Titov. 12, 456 (1967) [12, 525 (1967)]

LAPSKER, Ya. É.
Hydrothermal Synthesis of Potassium Niobate and Potassium Tantalate. (E) A. A. Shternberg, Ya. É. Lapsker, and V. A. Kuznetsov. 12, 838 (1968) [12, 957 (1967)]

LARIKOV, L. N.
Growth Mechanism of α-Modification Centers in High-Purity Tin. (E/T) A. I. Bykhovskii, L. N. Larikov, and V. M. Fal'chenko. 12, 460 (1967) [12, 528 (1967)]

LEITSCHKIS, D. L.
On the Theory of Crystallization. (T) D. L. Leitschkis. 12, 459 (1967) [12, 527 (1967)]

LEVDIK, V. A.
Helium Cryostat for a Neutron Diffractometer. (E) V. S. Golovkin, V. N. Bykov, N. V. Khoteev, and V. A. Levdik. 12, 477 (1967) [12, 542 (1967)]

LOBANOVA, G. M.
A Preliminary Model of the Benzophenonon Structure. (E) E. B. Vul and G. M. Lobanova. 12, 355 (1967) [12, 411 (1967)]

LOMOVA, L. G.
Some Physical Properties of Deuterated Potassium Dihydrogen Phosphate Single Crystals in the Paraelectric Phase. (E) A. S. Vasilevskaya, S. S. Gorbach, M. F. Koldobskaya, L. I. Kuznetsova, L. G. Lomova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 308 (1967) [12, 361 (1967)]
Some Physical Properties of Rubidium Dihydrogen Phosphate Single Crystals. (E) A. S. Vasilevskaya, M. F. Koldobskaya, L. G. Lomova, V. P. Popova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 383 (1967) [12, 447 (1967)]

LUBE, É. L.
A Program for Obtaining a Set of Integrated Intensities with a Nonautomatic X-Ray Diffractometer. (T) É. L. Lube, L. A. Butman, and D. M. Kheiker. 12, 614 (1968) [12, 710 (1967)]
An Automatic Equiinclination Diffractometer for Single Crystals. (E) D. M. Kheiker, É. L. Lube, A. V. Mirenskii, N. I. Komyak, O. V. Maklakov, L. Z. Tatkin, É. N. Gurevich, and V. S. Rogachev. 12, 802 (1968) [12, 924 (1967)]

LUK'YANOVA, N. I.
Solubility and Conditions of Growth of Corundum from Molten Fluxes. (E) V. A. Timofeeva and N. I. Luk'yanova. 12, 77 (1967) [12, 98 (1967)]

LUNDIN, A. G.
Nuclear Magnetic Resonance in Sodium Hydroselenite Single Crystals. (E) G. V. Gavrilova-Podol'skaya, S. P. Gabuda, and A. G. Lundin. 12, 114 (1967) [12, 141 (1967)]

LUTSIV-SHUMSKII, L. F.
Temperature and Wavelength Dependences of the Electrooptical Coefficient r_{63} in ADP Crystals. (E) O. G. Blokh and L. F. Lutsiv-Shumskii. 12, 380 (1967) [12, 443 (1967)]
Spontaneous Electrooptical Effect in Rochelle Salt Crystals. (E) O. G. Blokh and L. F. Lutsiv-Shumskii. 12, 389 (1967) [12, 455 (1967)]

LYUBIMOV, V. N.
Symmetries of Higher-Order Multiples. (T) V. N. Lyubimov. 12, 102 (1967) [12, 130 (1967)]
Derivation of Symmetry and Antisymmetry Groups. (T) V. N. Lyubimov. 12, 290 (1967) [12, 348 (1967)]
Interrelation between the Electrical, Magnetic, and Mechanical Properties of Crystals. (T) V. N. Lyubimov. 12, 612 (1968) [12, 708 (1967)]

LYUBOV, B. Ya.
Theory of a Method of Experimentally Determining the Growth Rate of Metallic Crystals as a Function of Supercooling. (T/E) V. S. Gerasimenko and B. Ya. Lyubov. 12, 734 (1968) [12, 840 (1967)]

MAGOMEDOV, Kh. A.
Growth Rate of Crystalline Layers of Gallium Arsenide in the Iodide Process. (E) N. N. Sheftal' and Kh. A. Magomedov. 12, 129 (1967) [12, 152 (1967)]
Influence of Preparatory Surface Treatment of Gallium Arsenide Substrates on the Perfection of Autoepitaxial Layers Growing on Them. (E) Kh. A. Magomedov and N. N. Magomedov. 12, 286 (1967) [12, 343 (1967)]

MAGOMEDOV, N. N.
Influence of Preparatory Surface Treatment of Gallium Arsenide Substrates on the Perfection of Autoepitaxial Layers Growing on Them. (E) Kh. A. Magomedov and N. N. Magomedov. 12, 286 (1967) [12, 343 (1967)]

MAGOMEDOV, Z. A.
Thin-Film Piezoelectric Textures. (E/T) S. A. Semiletov and Z. A. Magomedov. 12, 326 (1967) [12, 376 (1967)]
Structure of Epitaxial CdS Thin Films Obtained by Sputtering in Vacuum. (E) Z. A. Magomedov and S. A. Semiletov. 12, 470 (1967) [12, 536 (1967)]

MAKAROV, V. P.
Substructure of Single Crystals of a Cobalt–Iron Alloy. (E) V. P. Ovcharov, N. N. Geveling, and V. P. Makarov. 12, 652 (1968) [12, 738 (1967)]

MAKLAKOV, O. V.
An Automatic Equiinclination Diffractometer for Single Crystals. (E) D. M. Kheiker, É. L. Lube, A. V. Mirenskii, N. I. Komyak, O. V. Maklakov, L. Z. Tatkin, É. N. Gurevich, and V. S. Rogachev. 12, 802 (1968) [12, 924 (1967)]

MAKSIMOVA, N. V.
Crystal Structure of Thorolite, $Sn(Ta, Nb)_2O_7$. (E) N. V. Maksimova and V. V. Ilyukhin. 12, 105 (1967) [12, 133 (1967)]

MALINENKO, I. A.
Diffuse Scattering of X Rays by Gamma-Irradiated Metals. (E) I. A. Malinenko and O. N. Shivrin. 12, 958 (1968) [12, 1091 (1967)]

MAMEDOV, K. P.
Crystallization Mechanism of Selenium. (E/T) K. P. Mamedov and Z. D. Nurieva. 12, 605 (1968) [12, 698 (1967)]

MARCHENKO, E. I.
Ferroelectric Response of Tetramethylammonium Triiodomercurate. (E) V. A. Gerken, V. I. Pakhomov, A. S. Sonin, E. I. Marchenko, and V. N. Nepomnyashchaya. 12, 531 (1968) [12, 607 (1967)]

MARTYSHEV, Yu. N.
Charged Dislocations in Cesium Iodide. (E/T) R. De Batist, E. von Dingen, Yu. N. Martyshev, I. M. Sil'vestrova, and A. A. Urusovskaya. 12, 881 (1968) [12, 1012 (1967)]

MASLOV, V. N.
Production of Single Crystal Plates of Indium Antimonide by Crystallization of Droplets of the Melt in the Gap between Quartz Plates. (E) N. M. Demenkov and V. N. Maslov. 12, 650 (1968) [12, 737 (1967)]

MATSONASHVILI, B. N.
Dielectric Properties of $SrTiO_3$ Crystals, Pure and Doped with Iron and Chromium. (E) B. N. Matsonashvili. 12, 534 (1968) [12, 612 (1967)]
Electrical and Optical Properties of $BaTiO_3$ Crystals Doped with Iron and Cobalt. (E) B. N. Matsonashvili. 12, 867 (1968) [12, 995 (1967)]

MAZO, D. M.
X-Ray-Diffraction Determination of the Oxygen Parameter of Ferrites with the Spinel Structure from the "Forbidden" Reflections (442) and (644). (E) D. M. Mazo. 12, 521 (1968) [12, 595 (1967)]

MEDVEDEV, A. V.
Preliminary Data on the Crystal Structure of Magnesium Molybdate. (E) V. I. Pakhomov and A. V. Medvedev. 12, 925 (1968) [12, 1064 (1967)]

MELESHINA, V. A.
Selective Etching on Dislocations in Crystals of Potassium Tartrate Hemihydrate. (E) V. A. Meleshina. 12, 322 (1967) [12, 371 (1967)]
Method for the Selective Etching of Ammonium Dihydrogen Phosphate Crystals. (E) V. A. Meleshina, T. F. Chernysheva, and N. B. Russova. 12, 454 (1967) [12, 523 (1967)]

MESHCHERYAKOV, V. F.
Synthesis of Otavite Crystals and Observation of the EPR Spectra of Co^{+2} Ions in Them. (E) A. S. Borovik-Romanov, N. Yu. Ikornikova, V. F. Meshcheryakov, and E. G. Rudashevskii. 12, 417 (1967) [12, 488 (1967)]

MILL', B. V.
Hydrothermal Synthesis of Aluminum and Gallium Garnets. (E) B. V. Mill'. 12, 137 (1967) [12, 158 (1967)]

MIL'VIDSKII, M. G.
Effect of Doping on the Temperature Dependence of the Microhardness and Dislocation Structure of Semiconducting Single Crystals. (E) M. G. Mil'vidskii, V. B. Osvenskii, and O. G. Stolyarov. 12, 896 (1968) [12, 1030 (1967)]

X-Ray Investigation of Some Peculiarities of the Impurity Distribution in Strongly-Doped Silicon Single Crystals. (E) V. G. Fomin and M. G. Mil'vidskii. 12, 955 (1968) [12, 1089 (1967)]

MIRENSKII, A. V.

A Precise Polarimeter and Its Application to Study of Changes of the Rotation of the Polarization Plane of Light and the Rotational Electrooptic Effect in Ferroelectrics. (E) N. R. Ivanov, L. A. Shuvalov, A. V. Mirenskii, and G. D. Shnyrev. 12, 256 (1967) [12, 307 (1967)]

An Automatic Equilinclination Diffractometer for Single Crystals. (E) D. M. Khelker, É. L. Lube, A. V. Mirenskii, N. I. Komyak, O. V. Maklakov, L. Z. Tatkin, É. N. Gurevich, and V. S. Rogachev. 12, 802 (1968) [12, 924 (1967)]

MIRISHLI, F. A.

X-Ray and Electrical Studies of the System $Bi_4Ti_3O_{12}$–$BiFeO_3$. (E) I. G. Ismailzade, V. I. Nesterenko, F. A. Mirishli, and P. G. Rustamov. 12, 400 (1967) [12, 468 (1967)]

MIRKIN, L. I.

Interaction of Dislocations with Block Boundaries in NaCl Crystals. (E) L. I. Mirkin and T. M. Aver'yanova. 12, 450 (1967) [12, 521 (1967)]

Effect of Light Pulses on the Dislocation Structure of Sodium Chloride. (E/T) T. M. Aver'yanova, L. I. Mirkin, and N. F. Pilipetskii. 12, 889 (1968) [12, 1022 (1967)]

MITYAGIN, A. Yu.

A Criterion for the Applicability of the Born Approximation to Electron-Diffraction Structural Studies. (T) V. F. Dvoryankin, A. Yu. Mityagin, and S. A. Akhundov. 12, 509 (1968) [12, 579 (1967)]

Some Problems in the Geometry of Diffraction Patterns from Slow Electrons. (T/E) V. F. Dvoryankin and A. Yu. Mityagin. 12, 845 (1968) [12, 966 (1967)]

Diffraction of Slow Electrons: A Method of Studying the Atomic Structure of Surfaces. (R) V. F. Dvoryankin and A. Yu. Mityagin. 12, 982 (1968) [12, 1112 (1967)]

MOSKALEV, V. M.

Growth Figures and Dislocations in Rock-Salt Single-Crystal Layers. (E) V. M. Kosevich, V. M. Moskalev, and L. S. Palatnik. 12, 581 (1968) [12, 667 (1967)]

MYASNIKOVA, R. M.

Phase Diagram of the Biphenyl – α,α'-Dipyridyl System. (E) S. A. Remyga, R. M. Myasnikova, and A. I. Kitaigorodskii. 12, 784 (1968) [12, 900 (1967)]

NABITOVICH, I. D.

Determination of the Coherent Intensity and Background Intensity from the Observed Electron-Scattering Curve. (T/E) I. D. Nabitovich, Ya. I. Stetsiv, and Ya. V. Voloshchuk. 12, 513 (1968) [12, 584 (1967)]

NABOKA, M. N.

Growth of Strip and Whisker Crystals of Cadmium Sulfide. (E) L. S. Palatnik, M. N. Naboka, and N. T. Gladkikh. 12, 594 (1968) [12, 684 (1967)]

NEPOMNYASHCHAYA, V. N.

Ferroelectric Response of Tetramethylammonium Triiodomercurate. (E) V. A. Gerken, V. I. Pakhomov, A. S. Sonin, E. I. Marchenko, and V. N. Nepomnyashchaya. 12, 531 (1968) [12, 607 (1967)]

NERONOVA, N. N.

Classification Principles for the Symmetry and Antisymmetry Groups. II. Special Spatial Elements as the Basis of Classification for Symmetry Groups. (T) N. N. Neronova. 12, 3 (1967) [12, 3 (1967)]

Classification Principles for Symmetry Groups and Groups of Different Kinds of Antisymmetry. III. Brief Survey of "Crystallographic" Symmetry Groups of Three-Dimensional Continua, Discontinua, Semicontinua, and Aperiodic Objects. (T) N. N. Neronova. 12, 159 (1967) [12, 191 (1967)]

NESTERENKO, V. I.

X-Ray and Electrical Studies of the System $Bi_4Ti_3O_{12}$–$BiFeO_3$. (E) I. G. Ismailzade, V. I. Nesterenko, F. A. Mirishli, and P. G. Rustamov. 12, 400 (1967) [12, 468 (1967)]

A Method for Finding the Curie Temperature and Measuring the Temperature Dependence of the Dielectric Susceptibility of Ferroelectrics and Antiferroelectrics with High Electrical Conductivity. (E) I. G. Ismailzade and V. I. Nesterenko. 12, 625 (1968) [12, 717 (1967)]

NEVEROV, V. V.

Heating of Cracks in Rock Salt Crystals. (E) Yu. V. Grdina and V. V. Neverov. 12, 421 (1967) [12, 493 (1967)]

NIKITICHEV, P. I.

Growth of Large Corundum Crystals by the Hydrothermal Method. (E) K. F. Kashkurov, P. I. Nikitichev, V. V. Osipov, L. D. Sizova, and A. V. Simonov. 12, 837 (1968) [12, 956 (1967)]

NIKITIN, V. Ya.

The Crystal Structure of Catalase. (E) B. K. Vainshtein, V. V. Baryshn, G. V. Gurskaya, and V. Ya. Nikitin. 12, 750 (1968) [12, 860 (1967)]

NOSOV, V. N.

Mechanism of the Change in Photoconductivity of SbSI Single Crystals in the Region of the Ferroelectric Phase Change. (E) V. N. Nosov. 12, 306 (1967) [12, 359 (1967)]

NRAN'YAN, A. A.

Higher Order Elastic Constants of Cubic Crystals. (T) A. A. Nran'yan. 12, 876 (1968) [12, 1006 (1967)]

NURIEVA, Z. D.

Crystallization Mechanism of Selenium. (E/T) K. P. Mamedov and Z. D. Nurieva. 12, 605 (1968) [12, 698 (1967)]

OMEL'CHENKO, Yu. A.

Crystal Structure of the Modification of p-Bromodiazoaniline. (E) Yu. A. Omel'chenko and Yu. D. Kondrashev. 12, 359 (1967) [12, 416 (1967)]

ONISHCHENKO, N. Ya.

Conoscopy of Elongated Capron Monofilaments. (E) M. A. Genina and N. Ya. Onishchenko. 12, 475 (1967) [12, 540 (1967)]

ORLOV, A. N.

Structure of Dislocation Kinks and Steps in the Germanium Lattice. (E) A. N. Orlov and E. M. Zonshain. 12, 831 (1968) [12, 951 (1967)]

ORLOV, S. S.

Solution of Three-Dimensional Field Anisotropy Problems Using Rectilinear Generators. (T) V. L. Indenbom and S. S. Orlov. 12, 849 (1968) [12, 971 (1967)]

OSIPOV, V. V.

Growth of Large Corundum Crystals by the Hydrothermal Method. (E) K. F. Kashkurov, P. I. Nikitichev, V. V. Osipov, L. D. Sizova, and A. V. Simonov. 12, 837 (1968) [12, 956 (1967)]

A New High-Pressure Apparatus. (E) A. V. Simonov and V. V. Osipov. 12, 980 (1968) [12, 1109 (1967)]

OSVENSKII, V. B.

Effect of Doping on the Temperature Dependence of the Microhardness and Dislocation Structure of Semiconducting Single Crystals. (E) M. G. Mil'vidskii, V. B. Osvenskii, and O. G. Stolyarov. 12, 896 (1968) [12, 1030 (1967)]

OVCHAROV, V. P.

Substructure of Single Crystals of a Cobalt–Iron Alloy. (E) V. P. Ovcharov, N. N. Geveling, and V. P. Makarov. 12, 652 (1968) [12, 738 (1967)]

OZEROV, R. P.

Systematic Extinctions of Reflection in the Coherent Magnetic Scattering of Slow Neutrons, Due to the Presence of Symmetry and Antisymmetry Elements in Collinear Magnetic Materials. (T) R. P. Ozerov. 12, 199 (1967) [12, 239 (1967)]

PAKHOMOV, V. I.

Ferroelectric Response of Tetramethylammonium Triiodomercurate. (E) V. A. Gerken, V. I. Pakhomov, A. S. Sonin, E. I. Marchenko, and V. N. Nepomnyashchaya. 12, 531 (1968) [12, 607 (1967)]

Preliminary Data on the Crystal Structure of Magnesium Molybdate. (E) V. I. Pakhomov and A. V. Medvedev. 12, 925 (1968) [12, 1064 (1967)]

PALATNIK, L. S.

Growth Figures and Dislocations in Rock-Salt Single-Crystal Layers. (E) V. M. Kosevich, V. M. Moskalev, and L. S. Palatnik. 12, 581 (1968) [12, 667 (1967)]

Growth of Strip and Whisker Crystals of Cadmium Sulfide. (E) L. S. Palatnik, M. N. Naboka, and N. T. Gladkikh. 12, 594 (1968) [12, 664 (1967)]

Effect of Annealing on the Properties of the Mosaic Structure of Al and Sn Vacuum Condensates. (E) L. S. Palatnik, M. Ya. Fuks, B. T. Bolko, and P. A. Panchekha. 12, 793 (1968) [12, 911 (1967)]

PALISTRANT, A. F.

Groups of Colored Symmetry and of Different Kinds of Anti-symmetry of Layers. (T) A. F. Palistrant. 12, 162 (1967) [12, 194 (1967)]

PANCHEKHA, P. A.

Effect of Annealing on the Properties of the Mosaic Structure of Al and Sn Vacuum Condensates. (E) L. S. Palatnik, M. Ya. Fuks, B. T. Bolko, and P. A. Panchekha. 12, 793 (1968) [12, 911 (1967)]

PAPKOV, V. S.

Influence of Block Structure and Slip Planes on the Divergence of the Laser Radiation of Ruby Crystals. (E/T) E. M. Akulenok, Kh. S. Bagdasarov, V. S. Papkov, and V. Ya. Khaimov-Mal'kov. 12, 237 (1967) [12, 286 (1967)]

PARVOV, V. F.

Growing of Crystals from Aqueous Solutions at Constant Temperature and Supersaturation. (E) V. F. Parvov. 12, 324 (1967) [12, 374 (1967)]

The Growing of Potassium Dichromate Crystals in the Form of a Growth Pyramid of One (001) Face. (E) V. F. Parvov. 12, 465 (1967) [12, 532 (1967)]

PASTUR, L. A.

Dislocation and Linear Charge Fields in Piezoelectric Crystals. (T) A. M. Kosevich, L. A. Pastur, and É. P. Fel'dman. 12, 797 (1968) [12, 916 (1967)]

PAVLOV, P. V.

Electron Diffraction Investigation of the Structure of SiO_2 Films Obtained by Different Methods. (E) P. V. Pavlov and É. V. Shitova. 12, 95 (1967) [12, 119 (1967)]

Amorphization of Polycrystalline Germanium Films on Irradiation with Argon Ions. (E) P. V. Pavlov, D. I. Tetel'baum, E. I. Zorin, and R. V. Kudryavtseva. 12, 134 (1967) [12, 155 (1967)]

PAVLOVSKAYA, L. G.

The Microhardness of LiF as a Function of Temperature. (E) G. P. Upit, S. A. Varchenya, and L. G. Pavlovskaya. 12, 949 (1968) [12, 1084 (1967)]

PAVLOVSKAYA, V. S.

Nuclear Magnetic Resonance Study of Ruby Single Crystals. (E) V. S. Pavlovskaya, V. F. Belov, M. D. Kapustina, A. N. Assbin, and V. Ya. Khaimov-Mal'kov. 12, 41 (1967) [12, 51 (1967)]

PEKAREV, A. I.

Heteroepitaxy of Molybdenum on Tungsten from the Liquid State. (E) Yu. D. Chistyakov, A. I. Pekarev, and M. V. Gartman. 12, 597 (1968) [12, 688 (1967)]

PEREKALINA, Z. B.

Experimental Investigation of the Rotation of the Plane of Polarization of Light in Dithionate Crystals. (E/T) L. M. Belyaev and Z. B. Perekalina. 12, 243 (1967) [12, 291 (1967)]

PEREVEZENTSEVA, G. I.

Some Structural and Electrical Properties of Lead Sulfide Films. (E) R. V. Kudryavtseva, S. A. Semiletov, and G. I. Perevezentseva. 12, 86 (1967) [12, 109 (1967)]

PERFILOVA, V. É.

The Quadratic Electrooptic Effect in Single Crystals of Ammonium Dihydrogen Phosphate. (E) V. É. Perfilova. 12, 621 (1968) [12, 715 (1967)]

PETEL'GUZOV, I. A.

The Growing of Magnesium Single Crystals. (E) V. F. Zelenskii and I. A. Petel'guzov. 12, 466 (1967) [12, 533 (1967)]

PETROV, I. P.

Spectral Investigations of Thermoluminescence in Quartz Containing Additions of Aluminum and Germanium by Fourier Spectrometry. (E) I. P. Petrov. 12, 117 (1967) [12, 144 (1967)]

PETROV, T. G.

Epitaxy of Ice on Sodium Bromate Crystals. (E) T. G. Petrov and A. P. Kazatkin. 12, 647 (1968) [12, 735 (1967)]

PIKKA, T. A.

Electrical Conductivity of Some Ferroelectric V-VI-VIII-Group Semiconductors. (E) T. A. Pikka. 12, 938 (1968) [12, 1075 (1967)]

PILIPETSKII, N. F.

Effect of Light Pulses on the Dislocation Structure of Sodium Chloride. (E/T) T. M. Aver'yanova, L. I. Mirkin, and N. F. Pilipetskii. 12, 889 (1968) [12, 1022 (1967)]

PINES, B. Ya.

X-Ray Diffraction Method of Determining Substructure. (T/E) B. Ya. Pines, E. E. Badiyan, A. F. Sirenko, and D. D. Solnyshkin. 12, 365 (1967) [12, 423 (1967)]

Electron-Diffraction Study of Surface Diffusion in the Copper–Nickel and Copper–Silver Systems. (E) B. Ya. Pines, I. P. Grebennik, and I. V. Gektina. 12, 556 (1968) [12, 639 (1967)]

PINSKER, Z. G.

Investigations of the Conditions of Formation and the Real and Atomic Structures of Thin Films in the USSR. (R) Z. G. Pinsker and S. A. Semiletov. 12, 702 (1968) [12, 801 (1967)]

Electron-Diffraction Study of Tantalum Dioxide in Thin Films. (E) V. I. Khitrova, V. V. Klechkovskaya, and Z. G. Pinsker. 12, 907 (1968) [12, 1044 (1967)]

PLATONOV, G. L.

Electron-Microscopic Investigation of the Structure of Tetragonal Barium Titanate. (E) G. L. Platonov, Yu. Ya. Tomashpol'skii, Yu. N. Venevtsev, and G. S. Zhdanov. 12, 808 (1968) [12, 933 (1967)]

PLATONOV, V. I.

A Small Crystal Neutron Spectrometer for Studies on Crystal Dynamics. (E) V. V. Gorbachev and V. I. Platonov. 12, 978 (1968) [12, 1108 (1967)]

PLYASOVA, L. M.

The Garnet Pattern in the Structure of Iron Molybdate. (T/E) L. M. Plyasova, S. V. Borisov, and N. V. Belov. 12, 25 (1967) [12, 33 (1967)]

A New Structural Type in the Molybdates and Tungstates of Trivalent Metals. (E) L. M. Plyasova, R. F. Klevtsova, S. V. Borisov, and L. M. Kefeli. 12, 816 (1968) [12, 939 (1967)]

POKROVSKAYA, S. V.

Etch Polishing of Germanium by Means of Gaseous Hydrogen Sulfide. (E) L. L. Vasil'eva and S. V. Pokrovskaya. 12, 127 (1967) [12, 150 (1967)]

PONYATOVSKII, E. G.

The Possibility of the Existence of a Singular Triple Point on the Pressure–Temperature Diagram of an Iron–Rhodium Alloy. (E) E. G. Ponyatovskii, A. R. Kut-sar, and G. T. Dubovka. 12, 63 (1967) [12, 79 (1967)]

POPOVA, I. I.

Effect of Temperature on Thermal Diffuse Scattering in Polycrystalline Al and Cu. (E) V. I. Iveronova, A. A. Katsnel'son, I. I. Popova, and S. V. Sveshnikov. 12, 775 (1968) [12, 888 (1967)]

POPOVA, V. P.

Some Physical Properties of Rubidium Dihydrogen Phosphate Single Crystals. (E) A. S. Vasilevskaya, M. F. Koldobskaya, L. G. Lomova, V. P. Popova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 383 (1967) [12, 447 (1967)]

PORAI-KOSHITS, M. A.

The Structure of Molecular Crystals. II. A Complete Calculation of the Close-Packed Arrays of Planar Molecules in Layers. (T/E) P. M. Zorkii and M. A. Porai-Koshits. 12, 863 (1968) [12, 989 (1967)]

PORTNOV, V. N.

Effect of Aluminum Ions on the Growth Rate of Potassium Dihydrogen Phosphate Crystal Faces. (E) V. N. Portnov. 12, 463 (1967) [12, 530 (1967)]

PREDVODITELEV, A. A.

Dislocation Structure of Decorated NaCl Crystals. (E) A. A. Predvoditelev, V. N. Rozhanskii, and E. V. Darinskaya. 12, 265 (1967) [12, 319 (1967)]

PYATENKO, Yu. A.
Crystal Structure of Burbankite. (E) A. A. Voronkov, N. G. Shumyatskaya, and Yu. A. Pyatenko. 12, 107 (1967) [12, 135 (1967)]
X-Ray Diffraction Study of the Atomic Structure of Stillwellite CeBO[SiO$_4$]. (E) A. A. Voronkov and Yu. A. Pyatenko. 12, 214 (1967) [12, 258 (1967)]
PYLAEVA, E. N.
Crystalline Structures of Some Compounds in the Nb–Ni and Ta–Ni Systems. (E) P. I. Kripyakevich and E. N. Pylaeva. 12, 294 (1967) [12, 350 (1967)]
RADAUTSAN, S. I.
Crystal Structure of $Zn_4In_2S_7$. (E) F. G. Donika, G. A. Kiosse, S. I. Radautsan, S. A. Semiletov, and V. F. Zhitar'. 12, 745 (1968) [12, 854 (1967)]
RAIGORODSKII, L. D.
Reflection of Atomic Beams from the Surface of Single Crystals. (E) L. D. Raigorodskii. 12, 452 (1967) [12, 522 (1967)]
RAKOVA, E. V.
Growth of Epitaxial Germanium Films by the Sandwich Method. (E) B. S. Kurbatov, E. V. Rakova, and G. A. Kurov. 12, 140 (1967) [12, 160 (1967)]
RASHKOVICH, L. N.
Nonlinear Optical Properties of Single Crystals of Deuterated Ammonium Dihydrogen Phosphate. (E) A. S. Vasilevskaya, E. N. Volkova, V. A. Koptsik, L. N. Rashkovich, T. A. Regul'skaya, I. S. Rez, A. S. Sonin, and V. S. Suvorov. 12, 446 (1967) [12, 518 (1967)]
REBENKO, A. N.
Program for Calculation of Interplanar Spacings in the ALGOL-60 Language. (E) F. A. Brusentsev and A. N. Rebenko. 12, 434 (1967) [12, 510 (1967)]
REGUL'SKAYA, T. A.
Some Physical Properties of Deuterated Potassium Dihydrogen Phosphate Single Crystals in the Paraelectric Phase. (E) A. S. Vasilevskaya, S. S. Gorbach, M. F. Koldobskaya, L. I. Kuznetsova, L. G. Lomova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 308 (1967) [12, 361 (1967)]
Some Physical Properties of Rubium Dihydrogen Phosphate Single Crystals. (E) A. S. Vasilevskaya, M. F. Koldobskaya, L. G. Lomova, V. P. Popova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 383 (1967) [12, 447 (1967)]
Nonlinear Optical Properties of Single Crystals of Deuterated Ammonium Dihydrogen Phosphate. (E) A. S. Vasilevskaya, E. N. Volkova, V. A. Koptsik, L. N. Rashkovich, T. A. Regul'skaya, I. S. Rez, A. S. Sonin, and V. S. Suvorov. 12, 446 (1967) [12, 518 (1967)]
REMYGA, S. A.
Phase Diagram of the Biphenyl – $\alpha\alpha'$-Dipyridyl System. (E) S. A. Remyga, R. M. Myasnikova, and A. I. Kitaigorodskii. 12, 784 (1968) [12, 900 (1967)]
REZ, I. S.
Some Physical Properties of Deuterated Potassium Dihydrogen Phosphate Single Crystals in the Paraelectric Phase. (E) A. S. Vasilevskaya, S. S. Gorbach, M. F. Koldobskaya, L. I. Kuznetsova, L. G. Lomova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 308 (1967) [12, 361 (1967)]
Some Physical Properties of Rubidium Dihydrogen Phosphate Single Crystals. (E) A. S. Vasilevskaya, M. F. Koldobskaya, L. G. Lomova, V. P. Popova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 383 (1967) [12, 447 (1967)]
Nonlinear Optical Properties of Single Crystals of Deuterated Ammonium Dihydrogen Phosphate. (E) A. S. Vasilevskaya, E. N. Volkova, V. A. Koptsik, L. N. Rashkovich, T. A. Regul'skaya, I. S. Rez, A. S. Sonin, and V. S. Suvorov. 12, 446 (1967) [12, 518 (1967)]
ROBAS, V. I.
Phase Transitions in Molecular Crystals of C_6Cl_5F and C_6Br_5F. (E) T. A. Babushkina, V. M. Kozhin, V. I. Robas, I. A. Safin, G. K. Semin, and T. L. Khotsyanova. 12, 116 (1967) [12, 143 (1967)]
RODIONOVA, L. M.
Characteristics of the Additive Coloring of Alkali Halide Phosphors Activated by Silver Halides. (E) L. M. Shamovskii and L. M. Rodionova. 12, 582 (1968) [12, 646 (1967)]
ROGACHEV, V. S.
An Automatic Equinclination Diffractometer for Single Crystals. (E) D. M. Kheiker, É. L. Lube, A. V. Mirenskii, N. I. Komyak, O. V. Maklakov, L. Z. Tatkin, É. N. Gurevich, and V. S. Rogachev. 12, 802 (1968) [12, 924 (1967)]
ROGACHEVA, É. D.
Causes of the Predominance of Left-Handed Forms of Epsomite. (E) É. D. Rogacheva. 12, 961 (1968) [12, 1093 (1967)]
ROITBURD, A. L.
Orientational and Habit Relationships between Crystalline Phases in Solid State Transformations. (T) A. L. Roitburd. 12, 499 (1968) [12, 587 (1967)]
ROZHANSKII, V. N.
Dislocation Structure of Decorated NaCl Crystals. (E) A. A. Predvoditelev, V. N. Rozhanskii, and E. V. Darinskaya. 12, 265 (1967) [12, 319 (1967)]
RUBAN, Yu. V.
Epitaxy of Cadmium Selenide on CaF_2. (E) L. V. Al'tman, E. N. Vorontsova, Yu. V. Ruban, and G. P. Tikhomirov. 12, 901 (1968) [12, 694 (1967)]
RUDASHEVSKII, E. G.
Synthesis of Otavite Crystals and Observation of the EPR Spectra of Co^{+2} Ions in Them. (E) A. S. Borovik-Romanov, N. Yu. Ikornikova, V. F. Meshcheryakov, and E. G. Rudashevskii. 12, 417 (1967) [12, 488 (1967)]
RUSSOVA, N. B.
Method for the Selective Etching of Ammonium Dihydrogen Phosphate Crystals. (E) V. A. Melishnina, T. F. Chernysheva, and N. B. Russova. 12, 454 (1967) [12, 523 (1967)]
RUSTAMOV, P. G.
X-Ray and Electrical Studies of the System $Bi_4Ti_3O_{12}$–$BiFeO_3$. (E) I. G. Ismailzade, V. I. Nesterenko, F. A. Mirishli, and P. G. Rustamov. 12, 400 (1967) [12, 468 (1967)]
RYZHENKOV, A. P.
Ther Thermal Expansion of Molecular Crystals. I. Calculation of the Expansion Tensor for Naphthalene over a Wide Temperature Range. (E) A. P. Ryzhenkov and V. M. Kozhin. 12, 943 (1968) [12, 1079 (1967)]
SAFIN, I. A.
Phase Transitions in Molecular Crystals of C_6Cl_5F and C_6Br_5F. (E) T. A. Babushkina, V. M. Kozhin, V. I. Robas, I. A. Safin, G. K. Semin, and T. L. Khotsyanova. 12, 116 (1967) [12, 143 (1967)]
SAKEVICH, N. M.
Determination of the Interfacial Energy at the Boundary between the Solid and Liquid-Crystal Phases of Para-Azoxyanisole and Cholesteryl Caprinate. (E/T) F. K. Gorskii and N. M. Sakevich. 12, 586 (1968) [12, 674 (1967)]
SALLI, I. V.
Characteristics of the Growth of Silicon Single Crystals from the Gas Phase. (T/E) I. V. Salli, É. S. Fal'kovich, Yu. S. Dement'ev, E. N. Chukal'skii, V. V. Belousova, and V. G. Khrebtishchev. 12, 425 (1967) [12, 499 (1967)]
SAMOILOV, V. B.
Dynamic Measurement of the Pyroelectric Effect in TGS Crystals. (E) L. S. Kremenchugskii and V. B. Samoilov. 12, 940 (1968) [12, 1077 (1967)]
SAMOILOVICH, M. I.
Anomalous Piezochroism in Synthetic Smoky Quartz Crystals. (E/T) L. I. Tsinober, M. I. Samoilovich, L. A. Gordienko, and L. G. Chentsova. 12, 53 (1967) [12, 65 (1967)]
SEMILETOV, S. A.
Some Structural and Electrical Properties of Lead Sulfide Films. (E) R. V. Kudryavtseva, S. A. Semiletov, and G. I. Perevezentseva. 12, 86 (1967) [12, 109 (1967)]
Concentration and Type of Point Defects in Gallium Arsenide. (E/T) S. A. Semiletov. 12, 277 (1967) [12, 333 (1967)]
Thin-Film Pizoelectric Textures. (E/T) S. A. Semiletov and Z. A. Magomedov. 12, 326 (1967) [12, 476 (1967)]

Preparation of GaAs Epitaxial Films by the Sandwich Method. (E) A. V. Kovda and S. A. Semiletov. 12, 468 (1967) [12, 535 (1967)]

Structure of Epitaxial CdS Thin Films Obtained by Sputtering in Vacuum. (E) Z. A. Magomedov and S. A. Semiletov. 12, 470 (1967) [12, 536 (1967)]

Dependence of the Electron Mobility in Indium Arsenide Films on the Crystallite Orientation. (E) V. A. Vlasov and S. A. Semiletov. 12, 645 (1968) [12, 734 (1967)]

Investigations of the Conditions of Formation and the Real and Atomic Structures of Thin Films in the USSR. (R) Z. G. Pinsker and S. A. Semiletov. 12, 702 (1968) [12, 801 (1967)]

Crystal Structure of $Zn_3In_2S_6$. (E) F. G. Donika, G. A. Kiosse, S. I. Radautsan, S. A. Semiletov, and V. F. Zhitar'. 12, 745 (1968) [12, 854 (1967)]

Structure of Thin Indium Arsenide Films Prepared by Discrete Evaporation. (E) V. A. Vlasov and S. A. Semiletov. 12, 761 (1968) [12, 871 (1967)]

SEMIN, G. K.

Phase Transitions in Molecular Crystals of C_6Cl_5F and C_6Br_5F. (E) T. A. Babushkina, V. M. Kozhin, V. I. Robas, I. A. Safin, G. K. Semin, and T. L. Khotsyanova. 12, 116 (1967) [12, 143 (1967)]

SERGEEVA, L. A.

Preparation, Structure, and Some Photoelectric Properties of Single- and Multilayer Monocrystalline Chalcogenide Films of the Types $A^{II}B^{VI}$ and $A^{IV}B^{VI}$. (E) L. A. Sergeeva, I. P. Kalinkin, and V. B. Aleskovskii. 12, 90 (1967) [12, 113 (1967)]

SHABANOV, V. N.

Producing Degenerate Epitaxial Films of Germanium by the Iodide Method. (E) G. I. Uspenskaya, V. N. Shabanov, and V. A. Tolomasov. 12, 827 (1968) [12, 948 (1967)]

SHALIMOVA, K. V.

Crystal Structure and Electrical Properties of Indium Antimonide Films Deposited by the Three-Temperature Method. (E) K. V. Shalimova, A. M. Gulyaev, and S. A. Inozemtsev. 12, 569 (1968) [12, 653 (1967)]

SHAMBUROV, V. A.

Electrooptical Effect in Triglycine Sulfate Crystals at Room Temperature. (E) I. T. Tukhtasunov, V. A. Shamburov, and I. S. Zheludev. 12, 252 (1967) [12, 302 (1967)]

SHAMOVSKII, L. M.

Characteristics of the Additive Coloring of Alkali Halide Phosphors Activated by Silver Halides. (E) L. M. Shamovskii and L. M. Rodionova. 12, 562 (1968) [12, 646 (1967)]

SHAMYRKANOV, Y.

Mechanical Properties of Irradiated Sodium Fluoride Single Crystals Containing a Uranium Impurity. (E) A. A. Alybakov and Y. Shamyrkanov. 12, 635 (1968) [12, 726 (1967)]

SHCHEGOLEVA, T. V.

Structure of Al–Cu–Mg Alloy in the Initial Stages of Aging. (E) T. V. Shchegoleva and N. N. Buinov. 12, 552 (1968) [12, 635 (1967)]

SHUVALOV, L. A.

First All-Union Conference on Internal Friction in Nonmetallic Inorganic Materials. (R) N. A. Tyapunina, M. P. Shaskol'skaya, and L. A. Shuvalov. 12, 657 (1968) [12, 743 (1967)]

SHEFTAL', N. N.

Growth Rate of Crystalline Layers of Gallium Arsenide in the Iodide Process. (E) N. N. Sheftal' and Kh. A. Magomedov. 12, 129 (1967) [12, 152 (1967)]

SHEINKMAN, A. I.

Graphical Method of Plotting Regions of Diffuse Scattering. (T) G. V. Kleshchev and A. I. Sheinkman. 12, 903 (1968) [12, 1039 (1967)]

SHITOVA, É. V.

Elelectron Diffraction Investigation of the Structure of SiO_2 Films Obtained by Different Methods. (E) P. V. Pavlov and É. V. Shitova. 12, 95 (1967) [12, 119 (1967)]

SHIVRIN, D. N.

Estimate of Resolving Power and Choice of Optimum Exposure Conditions in the Determination of the Substructure Characteristics of Polycrystals from the Widths of Their X-Ray Reflections. (T) D. N. Shivrin. 12, 629 (1968) [12, 721 (1967)]

SHIVRIN, O. N.

Diffuse Scattering of X-Rays by Gamma-Irradiated Metals. (E) I. A. Malinenko and O. N. Shivrin. 12, 958 (1968) [12, 1091 (1967)]

SHNYREV, G. D.

A Precise Polarimeter and Its Application to Study of Changes of the Rotation of the Polarization Plane of Light and the Rotational Electrooptic Effect in Ferroelectrics. (E) N. R. Ivanov, L. A. Shuvalov, A. V. Mirenskii, and G. D. Shnyrev. 12, 256 (1967) [12, 307 (1967)]

SHTERNBERG, A. A.

Crystallization of Ruby under Hydrothermal Conditions. (E) V. A. Kuznetsov and A. A. Shternberg. 12, 280 (1967) [12, 336 (1967)]

Hydrothermal Synthesis of Potassium Niobate and Potassium Tantalate. (E) A. A. Shternberg, Ya. É. Lapsker, and V. A. Kuznetsov. 12, 838 (1968) [12, 957 (1967)]

SHUBNIKOV, A. V.

Coarsening of the Grains of Powdered Rochelle Salt in Its Own Solution Due to Temperature Fluctuations. (E) N. V. Gordeeva and A. V. Shubnikov. 12, 154 (1967) [12, 186 (1967)]

SHUMYATSKAYA, N. G.

Crystal Structure of Burbankite. (E) A. A. Voronkov, N. G. Shumyatskaya, and Yu. A. Pyatenko. 12, 107 (1967) [12, 135 (1967)]

SHUR, M. S.

Group-Theoretical Analysis and Basis Vectors of the Long-Wavelength Normal Vibrations of Crystals with the KH_2PO_4 Structure below the Curie Point. (T) M. S. Shur. 12, 181 (1967) [12, 215 (1967)]

Projection Operators for the Irreducible Representations of Space Groups. (T) M. S. Shur. 12, 857 (1968) [12, 981 (1967)]

SHUVALOV, I. A.

A Precise Polarimeter and Its Application to Study of Changes of the Rotation of the Polarization Plane of Light and the Rotational Electrooptic Effect in Ferroelectrics. (E) N. R. Ivanov, I. A. Shuvalov, A. V. Mirenskii, and G. D. Shnyrev. 12, 256 (1967) [12, 307 (1967)]

$KH_3(SeO_3)_2$ Crystal, a New Representative of the Hydroselenite Family. Dielectric Anomalies and Twinned Structure. (E/T) L. A. Shuvalov, N. R. Ivanov, and T. K. Sitnik. 12, 315 (1967) [12, 366 (1967)]

First All-Union Conference on Internal Friction in Nonmetallic Inorganic Materials. (R) N. A. Tyapunina, M. P. Shaskol'skaya, and L. A. Shuvalov. 12, 657 (1968) [12, 743 (1967)]

SHUVALOV, L. A.

A Precise Polarimeter and Its Application to Study of Changes of the Rotation of the Polarization Plane of Light and the Rotational Electrooptic Effect in Ferroelectrics. (E) N. R. Ivanov, L. A. Shuvalov, A. V. Mirenskii, and G. D. Shnyrev. 12, 256 (1967) [12, 307 (1967)]

SIDNENKO, E. V.

Measurement of the Electromechanical and Electrooptical Coefficients of an ADP Single Crystal Using a Twyman Interferometer. (E) E. V. Sidnenko and I. S. Zheludev. 12, 397 (1967) [12, 465 (1967)]

The Spontaneous Electrooptical Effect in Tetragonal $BaTiO_3$. (E) I. S. Zheludev, E. V. Sidnenko, and S. I. Teplyakova. 12, 528 (1968) [12, 604 (1967)]

SIL'VESTROVA, I. M.

Charged Dislocations in Cesium Iodide. (E/T) R. De Batist, E. von Dingen, Yu. N. Martyshev, I. M. Sil'vestrova, and A. A. Urusovskaya. 12, 881 (1968) [12, 1012 (1967)]

SIMONOV, A. V.

Growth of Large Corundum Crystals by the Hydrothermal Method. (E) K. F. Kashkurov, P. I. Nikitichev, V. V. Osipov, L. D. Sizova, and A. V. Simonov. 12, 837 (1968) [12, 956 (1967)]

Artificial Twinning in Synthetic Quartz Crystals. (E) V. T. Ushakovskii, K. F. Kashkurov, A. V. Simonov, and P. P. Butorin. 12, 954 (1968) [12, 1087 (1967)]

A New High-Pressure Apparatus. (E) A. V. Simonov and V. V. Osipov. 12, 980 (1968) [12, 1109 (1967)]

SIMONOV, M. A.
Crystal Structure of $SrMoO_4$. (E) Yu. K. Egorov-Tismenko, M. A. Simonov, and N. V. Belov. 12, 436 (1967) [12, 511 (1967)]
SIMONOV, V. I.
Problems of Crystallography (Results of the VII International Congress of Crystallographers). (R) V. I. Simonov. 12, 479 (1967) [12, 544 (1967)]
Characteristics of the Crystal Structure of Rinkite. (E) V. I. Simonov and N. V. Belov. 12, 740 (1968) [12, 848 (1967)]
SIPYAGIN, V. V.
Some Anomalies in the Face Growth Rates of $NaClO_3$ and $KClO_3$ as Functions of Temperature at Constant Supersaturation. (E) V. V. Sipyagin. 12, 590 (1968) [12, 678 (1967)]
SIRENKO, A. F.
X-Ray Diffraction Method of Determining Substructure. (T/E) B. Ya. Pines, E. E. Badiyan, A. F. Sirenko, and D. D. Solnyshkin. 12, 365 (1967) [12, 423 (1967)]
SIROTIN, Yu. I.
Group-Theoretical Treatment of the Antiferroelectric Phase Transformation in Ammonium Dihydrogen Phosphate. (T) Yu. I. Sirotin. 12, 175 (1967) [12, 208 (1967)]
SITNIK, T. K.
$KH_3(SeO_3)_2$ Crystal, a New Representative of the Hydroselenite Family. Dielectric Anomalies and Twinned Structure. (E/T) L. A. Shuvalov, N. R. Ivanov, and T. K. Sitnik. 12, 315 (1968) [12, 366 (1967)]
SIZOV, R. A.
Positions of Co^{2+} Ions in the Hexagonal Ferrites of the System $BaCO_x^{2+}Fe_{1-x}^{2+}Fe_8^{3+}O_{19}(Co_xW)$. (E) R. A. Sizov and I. I. Yamzin. 12, 111 (1967) [12, 138 (1967)]
SIZOVA, L. D.
Growth of Large Corundum Crystals by the Hydrothermal Method. (E) K. F. Kashkurov, P. I. Nikitichev, V. V. Osipov, L. D. Sizova, and A. V. Simonov. 12, 837 (1968) [12, 956 (1967)]
SKOLOZDRA, R. V.
W_4Fe_7-Type Compounds in the Nb–Fe, Ta–Fe, and Ta–Co Systems. (E) P. I. Kripyakevich, E. I. Gladyshevskii, and R. V. Skolozdra. 12, 525 (1968) [12, 600 (1967)]
SKOROKHOD, M. Ya.
Study of X-Ray Diffraction Images of Some Dislocations Generated in the Plastic Deformation of Germanium. (E) L. I. Datsenko and M. Ya. Skorokhod. 12, 409 (1967) [12, 480 (1967)]
SMIRNOV, L. S.
Effects of Electron and γ-Ray Bombardment on the Microhardness of Germanium. (E) V. V. Khainovskaya, F. L. Édel'man, and L. S. Smirnov. 12, 950 (1968) [12, 1085 (1967)]
SOBESSKI, Yu. P.
Some Physical Properties of Deuterated Potassium Dihydrogen Phosphate Single Crystals in the Paraelectric Phase. (E) A. S. Vasilevskaya, S. S. Gorbach, M. F. Koldobskaya, L. I. Kuznetsova, L. G. Lomova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 308 (1967) [12, 361 (1967)]
Some Physical Properties of Rubidium Dihydrogen Phosphate Single Crystals. (E) A. S. Vasilevskaya, M. F. Koldobskaya, L. G. Lomova, V. P. Popova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 383 (1967) [12, 447 (1967)]
SOBOLEVA, S. V.
Polytypism in Molybdenite. (T) B. B. Zvyagin and S. V. Soboleva. 12, 46 (1967) [12, 57 (1967)]
SOLNYSHKIN, D. D.
X-Ray Diffraction Method of Determining Substructure. (T/E) B. Ya. Pines, E. E. Badiyan, A. F. Sirenko, and D. D. Solnyshkin. 12, 365 (1967) [12, 423 (1967)]
SOLOV'EVA, L. P.
X-Ray Study of the Sodium-Iron Metagermanate $NaFeGe_2O_6$. (E) L. P. Solov'eva and V. V. Bakakin. 12, 517 (1968) [12, 591 (1967)]
SONIN, A. S.
Electrooptical Properties of Triglycine Sulfate. III. (E) A. S. Vasilevskaya and A. S. Sonin. 12, 248 (1967) [12, 297 (1967)]
Some Physical Properties of Deuterated Potassium Dihydrogen Phosphate Single Crystals in the Paraelectric Phase. (E) A. S. Vasilevskaya, S. S. Gorbach, M. F. Koldobskaya, L. I. Kuznetsova, L. G. Lomova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 308 (1967) [12, 361 (1967)]
Some Physical Properties of Rubidium Dihydrogen Phosphate Single Crystals. (E) A. S. Vasilevskaya, M. F. Koldobskaya, L. G. Lomova, V. P. Popova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 383 (1967) [12, 447 (1967)]
Electrooptical Properties of Triglycine Sulfate. IV. Deuterated Triglycine Sulfate. (E) A. S. Sonin and A. S. Vasilevskaya. 12, 386 (1967) [12, 451 (1967)]
Nonlinear Optical Properties of Single Crystals of Deuterated Ammonium Dihydrogen Phosphate. (E) A. S. Vasilevskaya, E. N. Volkova, V. A. Koptsik, L. N. Rashkovich, T. A. Regul'skaya, I. S. Rez, A. S. Sonin, and V. S. Suvorov. 12, 446 (1967) [12, 518 (1967)]
Ferroelectric Response of Tetramethylammonium Triiodomercurate. (E) V. A. Gerken, V. I. Pakhomov, A. S. Sonin, E. I. Marchenko, and V. N. Nepomnyashchaya. 12, 531 (1968) [12, 607 (1967)]
STARYI, I. B.
Studies of the Subgrain Structure of Curved Aluminum Crystal Analyzers of X-Ray Spectrographs. (E) I. B. Staryi and A. A. Khanonkin. 12, 633 (1968) [12, 724 (1967)]
STETSIV, Ya. I.
Determination of the Coherent Intensity and Background Intensity from the Observed Electron-Scattering Curve. (T/E) I. D. Nabitovich, Ya. I. Stetsiv, and Ya. V. Voloshchuk. 12, 513 (1968) [12, 584 (1967)]
STOLYAROV, O. G.
Effect of Doping on the Temperature Dependence of the Microhardness and Dislocation Structure of Semiconducting Single Crystals. (E) M. G. Mil'vidskii, V. B. Osvenskii, and O. G. Stolyarov. 12, 896 (1968) [12, 1030 (1967)]
SUVOROV, V. S.
Some Physical Properties of Deuterated Potassium Dihydrogen Phosphate Single Crystals in the Paraelectric Phase. (E) A. S. Vasilevskaya, S. S. Gorbach, M. F. Koldobskaya, L. I. Kuznetsova, L. G. Lomova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 308 (1967) [12, 361 (1967)]
Some Physical Properties of Rubidium Dihydrogen Phosphate Single Crystals. (E) A. S. Vasilevskaya, M. F. Koldobskaya, L. G. Lomova, V. P. Popova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 383 (1967) [12, 447 (1967)]
Nonlinear Optical Properties of Single Crystals of Deuterated Ammonium Dihydrogen Phosphate. (E) A. S. Vasilevskaya, E. N. Volkova, V. A. Koptsik, L. N. Rashkovich, T. A. Regul'skaya, I. S. Rez, A. S. Sonin, and V. S. Suvorov. 12, 446 (1967) [12, 518 (1967)]
SVESHNIKOV, S. V.
Effect of Temperature on Thermal Diffuse Scattering in Polycrystalline Al and Cu. (E) V. I. Iveronova, A. A. Katsnel'son, I. I. Popova, and S. V. Sveshnikov. 12, 775 (1968) [12, 888 (1967)]
SVIRIDOV, D. T.
Optical Properties of Silver Iodide Films. (E) R. N. Kurdyumova and D. T. Sviridov. 12, 643 (1968) [12, 733 (1967)]
SYRNIKOV, P. P.
Synthesis and X-Ray Examination of Single Crystals of $NaMF_3$ Type. (E) A. G. Tutov and P. P. Syrnikov. 12, 619 (1968) [12, 713 (1967)]
SYSOEV, L. A.
Growth of Hexagonal Zinc Sulfide and Investigation of Some of Its Physical Properties. (E) V. G. Zubov, L. A. Sysoev, and M. M. Firsova. 12, 67 (1967) [12, 84 (1967)]
TATARSKII, V. B.
An Example of Optical Pseudouniaxiality: Preobrazhenskite. (E) V. B. Tatarskii. 12, 302 (1967) [12, 356 (1967)]

TATKIN, L. Z.
An Automatic Equiinclination Diffractometer for Single Crystals. (E) D. M. Kheiker, É. L. Lube, A. V. Mirenskii, N. I. Komyak, O. V. Maklakov, L. Z. Tatkin, É. N. Gurevich, and V. S. Rogachev. 12, 802 (1968) [12, 924 (1967)]

TELEGUS, V. S.
Orthorhombic Modifications of the Compounds W_2C and Mo_2C. (E) V. S. Telegus, E. I. Gladyshevskii, and P. I. Kripyakevich. 12, 813 (1968) [12, 936 (1967)]

TEPLYAKOVA, S. I.
The Spontaneous Electrooptical Effect in Tetragonal $BaTiO_3$. (E) I. S. Zheludev, E. V. Sidnenko, and S. I. Teplyakova. 12, 528 (1968) [12, 604 (1967)]

TESLENKO, V. F.
Temperature Dependence of the Generalized Grüneisen Tensor for an Organic Crystal. (T/E) A. I. Kitaigorodskii, B. D. Koreshkov, and V. F. Teslenko. 12, 292 (1967) [12, 349 (1967)]
The Elastic Constants of Molecular Crystals. III. Temperature Dependence of the Elasticity Tensor of Naphthalene. (E) V. F. Teslenko. 12, 946 (1968) [12, 1082 (1967)]

TESLYUK, M. Yu.
New Compounds of the $MgZn_2$ Type in Systems of Rare-Earth Metals with Rhenium. (E) E. E. Cherkashin, M. Yu. Teslyuk, and D. P. Frankevich. 12, 617 (1968) [12, 712 (1967)]

TETEL'BAUM, D. I.
Amorphization of Polycrystalline Germanium Films on Irradiation with Argon Ions. (E) P. V. Pavlov, D. I. Tetel'baum, E. I. Zorin, and R. V. Kudryavtseva. 12, 134 (1967) [12, 155 (1967)]

TIKHOMIROV, G. P.
Epitaxy of Cadmium Selenide on CaF_2. (E) L. V. Al'tman, E. N. Vorontsova, Yu. V. Ruban, and G. P. Tikhomirov. 12, 601 (1968) [12, 694 (1967)]

TIKHONOV, L. V.
Use of Unsymmetrical Photographs to Investigate Dislocations in Germanium by the Borrmann Method. (E) L. V. Tikhonov and G. V. Khar'kova. 12, 951 (1968) [12, 1086 (1967)]

TIMOFEEVA, V. A.
Solubility and Conditions of Growth of Corundum from Molten Fluxes. (E) V. A. Timofeeva and N. I. Luk'yanova. 12, 77 (1967) [12, 98 (1967)]

TISHCHENKO, G. N.
Symmetry of Modification II of Gramicidin-C Hydrochloride Crystals. (T/E) E. V. Dornberger-Schiff and G. N. Tishchenko. 12, 301 (1967) [12, 355 (1967)]
Crystallographic Study of the Iodohydrate of Gramicidine C. (E) G. N. Tishchenko, K. A. Zykalova, and A. I. Grebenko. 12, 758 (1968) [12, 868 (1967)]

TITOV, V. A.
Effect of Indium Impurity on the Crystallization Process of Selenium. (E) V. N. Lange, T. I. Lange, and V. A. Titov. 12, 456 (1967) [12, 525 (1967)]

TOLOMASOV, V. A.
Producing Degenerate Epitaxial Films of Germanium by the Iodide Method. (E) G. I. Uspenskaya, V. N. Shabanov, and V. A. Tolomasov. 12, 827 (1968) [12, 948 (1967)]
Single-Crystal Layers of Germanium and Silicon, Prepared by Pyrolysis of Hydrides. (E) T. A. Zeveke, L. N. Kornev, and V. A. Tolomasov. 12, 919 (1968) [12, 1058 (1967)]

TOMASHPOL'SKII, Yu. Ya.
Calculation of Internal Electric Fields and Their Gradients in Ferrimagnetic $BiFeO_3$. (T) Yu. Ya. Tomashpol'skii and Yu. N. Venevtsev. 12, 18 (1967) [12, 24 (1967)]
X-Ray Diffraction Study of the Atomic Structure of Ferromagnetic $BiFeO_3$. (E) Yu. Ya. Tomashpol'skii, Yu. N. Venevtsev, and G. S. Zhdanov. 12, 209 (1967) [12, 252 (1967)]
Electron-Microscopic Investigation of the Structure of Tetragonal Barium Titanate. (E) G. L. Platonov, Yu. Ya. Tomashpol'skii, Yu. N. Venevtsev, and G. S. Zhdanov. 12, 808 (1968) [12, 933 (1967)]

TREIVUS, E. B.
Thermodynamic Interpretation of Nonequilibrium Forms of Crystals. (T) E. B. Treivus. 12, 432 (1967) [12, 508 (1967)]

TROITSKAYA, N. V.
Electron-Diffraction Investigation of Thin CdS Films. (E) B. D. Galkin, N. V. Troitskaya, and R. D. Ivanov. 12, 766 (1968) [12, 878 (1967)]

TRUSOVA, N. N.
Anisotropy of Thermoelectric Properties in Chromium Disilicide and in Single Crystals of the Highest Silicide of Manganese. (E) B. K. Voronov, L. D. Dudkin, and N. N. Trusova. 12, 448 (1967) [12, 519 (1967)]

TSINOBER, L. I.
Anomalous Pleochroism in Synthetic Smoky Quartz Crystals. (E/T) L. I. Tsinober, M. I. Samoilovich, L. A. Gordienko, and L. G. Chentsova. 12, 53 (1967) [12, 65 (1967)]

TSINZERLING, E. V.
Decoration of Quartz by a Precipitate Resulting from Chemical Reaction. (E/T) E. V. Tsinzerling. 12, 319 (1967) [12, 370 (1967)]
Point Pit Etching in Quartz. (E) E. V. Tsinzerling. 12, 637 (1968) [12, 727 (1967)]

TSIVINSKII, S. V.
A Relationship between the Thermal Characteristics of the Growth Process of Crystals from a Melt. (T) S. V. Tsivinskii. 12, 119 (1967) [12, 145 (1967)]

TSVANKIN, D. Ya.
Diffraction by a Linear System of Particles with an Arbitrary Form Factor. (T) D. Ya. Tsvankin. 12, 489 (1968) [12, 555 (1967)]

TUKHTASUNOV, I. T.
Electrooptical Effect in Triglycine Sulfate Crystals at Room Temperature. (E) I. T. Tukhtasunov, V. A. Shamburov, and I. S. Zheludev. 12, 252 (1967) [12, 302 (1967)]

TUMAN'YAN, Yu. A.
Calculation of the Crystallographic Directions on Electron Photomicrograms. (E/T) Yu. A. Tuman'yan and M. I. Zakharova. 12, 22 (1967) [12, 29 (1967)]

TUTOV, A. G.
Synthesis and X-Ray Examination of Single Crystals of $NaMF_3$ Type. (E) A. G. Tutov and P. P. Syrnikov. 12, 619 (1968) [12, 713 (1967)]

TYAPUNINA, N. A.
First All-Union Conference on Internal Friction in Nonmetallic Inorganic Materials. (R) N. A. Tyapunina, M. P. Shaskol'skaya, and L. A. Shuvalov. 12, 657 (1968) [12, 743 (1967)]

UPIT, G. P.
The Microhardness of LiF as a Function of Temperature. (E) G. P. Upit, S. A. Varchenya, and L. G. Pavlovskaya. 12, 949 (1968) [12, 1084 (1967)]

URUSOVSKAYA, A. A.
Charged Dislocations in Cesium Iodide. (E/T) R. De Batist, E. von Dingen, Yu. N. Martyshev, I. M. Sil'vestrova, and A. A. Urusovskaya. 12, 881 (1968) [12, 1012 (1967)]

USHAKOVSKII, V. T.
Artificial Twinning in Synthetic Quartz Crystals. (E) V. T. Ushakovskii, K. F. Kashkurov, A. V. Simonov, and P. P. Butorin. 12, 954 (1968) [12, 1087 (1967)]

USHKOVA, T. V.
Determination of Patterns of Macromosaic Substructure in Metal Single Crystals by X-Ray Diffraction Microscopy. (E) V. O. Esin and T. V. Ushkova. 12, 108 (1967) [12, 136 (1967)]

USPENSKAYA, G. I.
Producing Degenerate Epitaxial Films of Germanium by the Iodide Method. (E) G. I. Uspenskaya, V. N. Shabanov, and V. A. Tolomasov. 12, 827 (1968) [12, 948 (1967)]

USPENSKII, M. D.
A Method of Producing Films Homogeneous in Composition from $A^{III}B^{V}$ Semiconducting Compounds. (E) M. D. Uspenskii. 12, 142 (1967) [12, 162 (1967)]

VAG, A. S.
Application of the Selective Etch Methods in the Study of Structural Defects in Synthetic Quartz. (E) M. S. Joshi and A. S. Vag. 12, 573 (1968) [12, 656 (1967)]

VAINSHTEIN, B. K.
Electron Diffraction Determination of the Structure for the Lamellar Copper Glycinate Monohydrate Phase. (E) B. K. Vainshtein, I. A. D'yakon, and A. V. Ablov. 12, 299 (1967) [12, 354 (1967)]

At the Fifty-Year Mark. (R) B. K. Vainshtein. 12, 661 (1968) [12, 747 (1967)]
The Crystal Structure of Catalase. (E) B. K. Vainshtein, V. V. Barynin, G. V. Gurskaya, and V. Ya. Nikitin. 12, 750 (1968) [12, 860 (1967)]

VARCHENYA, S. A.
The Microhardness of LiF as a Function of Temperature. (E) G. P. Upit, S. A. Varchenya, and L. G. Pavlovskaya. 12, 949 (1968) [12, 1084 (1967)]

VASIL'EVA, L. L.
Etch Polishing of Germanium by Means of Gaseous Hydrogen Sulfide. (E) L. L. Vasil'eva and S. V. Pokrovskaya. 12, 127 (1967) [12, 150 (1967)]

VASILEVSKAYA, A. S.
Electrooptical Properties of Triglycine Sulfate. III. (E) A. S. Vasilevskaya and A. S. Sonin. 12, 248 (1967) [12, 297 (1967)]
Some Physical Properties of Deuterated Potassium Dihydrogen Phosphate Single Crystals in the Paraelectric Phase. (E) A. S. Vasilevskaya, S. S. Gorbach, M. F. Koldobskaya, L. I. Kuznetsova, L. G. Lomova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 308 (1967) [12, 361 (1967)]
Some Physical Properties of Rubidium Dihydrogen Phosphate Single Crystals. (E) A. S. Vasilevskaya, M. F. Koldobskaya, L. G. Lomova, V. P. Popova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 383 (1967) [12, 447 (1967)]
Electrooptical Properties of Triglycine Sulfate. IV. Deuterated Triglycine Sulfate. (E) A. S. Sonin and A. S. Vasilevskaya. 12, 386 (1967) [12, 451 (1967)]
Nonlinear Optical Properties of Single Crystals of Deuterated Ammonium Dihydrogen Phosphate. (E) A. S. Vasilevskaya, E. N. Volkova, V. A. Koptsik, L. N. Rashkovich, T. A. Regul'skaya, I. S. Rez, A. S. Sonin, and V. S. Suvorov. 12, 446 (1967) [12, 518 (1967)]

VENEVTSEV, Yu. N.
Calculation of Internal Electric Fields and Their Gradients in Ferrimagnetic $BiFeO_3$. (T) Yu. Ya. Tomashpol'skii and Yu. N. Venevtsev. 12, 18 (1967) [12, 24 (1967)]

X-Ray Diffraction Study of the Atomic Structure of Ferromagnetic $BiFeO_3$. (E) Yu. Ya. Tomashpol'skii, Yu. N. Venevtsev, and G. S. Zhdanov. 12, 209 (1967) [12, 252 (1967)]
Electron-Microscopic Investigation of the Structure of Tetragonal Barium Titanate. (E) G. L. Platonov, Yu. Ya. Tomashpol'skii, Yu. N. Venevtsev, and G. S. Zhdanov. 12, 808 (1968) [12, 933 (1967)]

VERBITSKAYA, T. N.
Optical Study of the Phase Composition of Barium Titanate with Small Additions of Chromium Oxide. (E) T. N. Verbitskaya and T. N. Burakova. 12, 375 (1967) [12, 436 (1967)]

VERTOPRAKHOV, V. N.
Selective Etching of Indium Antimonide Single Crystals in a Hydrochloric Acid Solution of Ferric Chloride. (E) V. N. Vertoprakhov and V. P. Zinov'eva. 12, 822 (1968) [12, 944 (1967)]

VERTSNER, V. N.
Observing the Recrystallization of Thin Gold Films in the Electron Microscope. (E) Gl. S. Zhdanov and V. N. Vertsner. 12, 829 (1968) [12, 949 (1967)]

VINNIK, M. A.
Cation Distributions in Ferrites with Hexagonal Structures. (E/T) M. A. Vinnik. 12, 344 (1967) [12, 398 (1967)]

VLASOV, V. A.
Dependence of the Electron Mobility in Indium Arsenide Films on the Crystallite Orientation. (E) V. A. Vlasov and S. A. Semiletov. 12, 645 (1968) [12, 734 (1967)]
Structure of Thin Indium Arsenide Films Prepared by Discrete Evaporation. (E) V. A. Vlasov and S. A. Semiletov. 12, 761 (1968) [12, 871 (1967)]

VOLKOVA, E. N.
Nonlinear Optical Properties of Single Crystals of Deuterated Ammonium Dihydrogen Phosphate. (E) A. S. Vasilevskaya, E. N. Volkova, V. A. Koptsik, L. N. Rashkovich, T. A. Regul'skaya, I. S. Rez, A. S. Sonin, and V. S. Suvorov. 12, 446 (1967) [12, 518 (1967)]

VOLOSHCHUK, Ya. V.
Determination of the Coherent Intensity and Background Intensity from the Observed Electron-Scattering Curve. (T/E) I. D. Nabitovich, Ya. I. Stetsiv, and Ya. V. Voloshchuk. 12, 513 (1968) [12, 584 (1967)]

VON DINGEN, E.
Charged Dislocations in Cesium Iodide. (E/T) R. De Batist, E. von Dingen, Yu. N. Martyshev, I. M. Sil'vestrova, and A. A. Urusovskaya. 12, 881 (1968) [12, 1012 (1967)]

VOROB'EV, G. M.
Regarding the Determination of Block Size from Extinction Effects. (E) G. M. Vorob'ev and L. I. Kotova. 12, 548 (1968) [12, 631 (1967)]

VORONKOV, A. A.
Crystal Structure of Burbankite. (E) A. A. Voronkov, N. G. Shumyatskaya, and Yu. A. Pyatenko. 12, 107 (1967) [12, 135 (1967)]
X-Ray Diffraction Study of the Atomic Structure of Stillwellite $CeBO[SiO_4]$. (E) A. A. Voronkov and Yu. A. Pyatenko. 12, 214 (1967) [12, 258 (1967)]

VORONKOV, V. V.
Profile of a Kinematic Shock Wave on a Crystal Surface. (T) V. V. Voronkov. 12, 15 (1967) [12, 19 (1967)]
Entrapment of an Impurity during the Movement of an Elementary Step. (T) V. V. Voronkov and A. A. Chernov. 12, 186 (1967) [12, 222 (1967)]
Angular Dependence of the Surface Free Energy of a Crystal. (T) V. V. Voronkov. 12, 728 (1968) [12, 831 (1967)]

VORONOV, B. K.
Anisotropy of Thermoelectric Properties in Chromium Disilicide and in Single Crystals of the Highest Silicide of Manganese. (E) B. K. Voronov, L. D. Dudkin, and N. N. Trusova. 12, 448 (1967) [12, 519 (1967)]

VORONOVA, I. D.
Some Aspects of the Growth of Epitaxial Germanium Films by the Sandwich Method. (E/T) I. D. Voronova and G. V. Chaplygin. 12, 99 (1967) [12, 125 (1967)]

VORONTSOVA, E. N.
Epitaxy of Cadmium Selenide on CaF_2. (E) L. V. Al'tman, E. N. Vorontsova, Yu. V. Ruban, and G. P. Tikhomirov. 12, 601 (1968) [12, 694 (1967)]

VORONTSOVA, R. P.
Growth Theory of Crystals Having a Diamond Lattice from the Gaseous Phase by Formation of Two-Dimensional Nuclei. (T) L. A. Borovinskii and R. P. Vorontsova. 12, 505 (1968) [12, 575 (1967)]

VOROSHILOV, Yu. V.
New Compounds with Structure of the Type $W_4Cr_{11}C_4$. (E) Yu. B. Kuz'ma and Yu. V. Voroshilov. 12, 297 (1967) [12, 353 (1967)]

VOSKANYAN, R. A.
Growth of Large Hematite Crystals from Solution in a Bi_2O_3–Na_2CO_3 (Flux) Melt. (E) R. A. Voskanyan and I. S. Zheludev. 12, 473 (1967) [12, 539 (1967)]

VOSKRESENSKAYA, I. E.
Color of Synthetic Tourmaline Crystals Containing Iron. (E) I. E. Voskresenskaya and S. V. Grum-Grzhimailo. 12, 311 (1967) [12, 363 (1967)]

VUL, E. B.
A Preliminary Model of the Benzophenone Structure. (E) E. B. Vul and G. M. Lobanova. 12, 355 (1967) [12, 411 (1967)]

YAMZIN, I. I.
Positions of Co^{2+} Ions in the Hexagonal Ferrites of the System $BaCO_X^{2+}Fe_{18-X}^{3+}Fe_{12}^{3+}O_{27}(Co_XW)$. (E) R. A. Sizov and I. I. Yamzin. 12, 111 (1967) [12, 138 (1967)]

YAROSLAVSKII, M. I.
Optimum Conditions for Excitation of the Inverse Piezoelectric Effect in Crystals. (T/E) A. E. Karaul'nik, I. S. Zheludev, and M. I. Yaroslavskii. 12, 262 (1967) [12, 314 (1967)]

YAVOROVSKII, I. G.
Some Peculiarities of the Growth of Potassium Dihydrogen Phosphate Single Crystals under Steady-State Conditions. (E) I. G. Yavorovskii. 12, 973 (1968) [12, 1104 (1967)]

ZAITSEVA, M. P.
Measurement of Some Electrostriction Coefficients for Ammonium Dihydrogen Phosphate. (E) M. P. Zaitseva and A. A. Fotchenkov. 12, 623 (1968) [12, 716 (1967)]

ZAKHAROVA, M. I.
Calculation of the Crystallographic Directions on Electron Photomicrograms. (E/T) Yu. A. Tuman'yan and M. I. Zakharova. 12, 22 (1967) [12, 29 (1967)]

ZALUTSKII, I. I.
RAl_3 Compounds in Rare Earth–Aluminum Systems and Their Crystal Structures. (E) I. I. Zalutskii and P. I. Kripyakevich. 12, 341 (1967) [12, 394 (1967)]

ZAMORZAEV, A. M.
Quasisymmetry (P-Symmetry) Groups. (T) A. M. Zamorzaev. 12, 717 (1968) [12, 819 (1967)]

ZARECHNYUK, O. S.
The Compound $LaCo_{13}$ and Its Crystal Structure. (E) O. S. Zarechnyuk and P. I. Kripyakevich. 12, 438 (1967) [12, 512 (1967)]

ZASLAVSKII, A. I.
Study of the Phase Transformation and Structure of α-GeTe. (E) T. B. Zhukova and A. I. Zaslavskii. 12, 28 (1967) [12, 37 (1967)]

ZELENSKII, V. F.
The Growing of Magnesium Single Crystals. (E) V. F. Zelenskii and I. A. Petel'guzov. 12, 466 (1967) [12, 533 (1967)]

ZEVEKE, T. A.
Single-Crystal Layers of Germanium and Silicon, Prepared by Pyrolysis of Hydrides. (E) T. A. Zeveke, L. N. Kornev, and V. A. Tolomasov. 12, 919 (1968) [12, 1058 (1967)]

ZHARIKOV, V. I.
Light Modulations in a Circularly Polarizing Modulating Field. (T) V. I. Zharikov. 12, 655 (1968) [12, 741 (1967)]

ZHDANOV, G. S.
X-Ray Diffraction Study of the Atomic Structure of Ferromagnetic $BiFeO_3$. (E) Yu. Ya. Tomashpol'skii, Yu. N. Venevtsev, and G. S. Zhdanov. 12, 209 (1967) [12, 252 (1967)]
Electron-Microscopic Investigation of the Structure of Tetragonal Barium Titanate. (E) G. L. Platonov, Yu. Ya. Tomashpol'skii, Yu. N. Venevtsev, and G. S. Zhdanov. 12, 808 (1968) [12, 933 (1967)]

ZHDANOV, Gl. S
Observing the Recrystallization of Thin Gold Films in the Electron Microscope. (E) Gl. S. Zhdanov and V. N. Vertsner. 12, 829 (1968) [12, 949 (1967)]

ZHELUDEV, I. S.
Electrooptical Effects in Triglycine Sulfate Crystals at Room Temperature. (E) I. T. Tukhtasunov, V. A. Shamburov, and I. S. Zheludev. 12, 252 (1967) [12, 302 (1967)]
Optimum Conditions for Excitation of the Inverse Piezoelectric Effect in Crystals. (T/E) A. E. Karaul'nik, I. S. Zheludev, and M. I. Yaroslavskii. 12, 262 (1967) [12, 314 (1967)]
Measurement of the Electromechanical and Electrooptical Coefficients of an ADP Single Crystal Using a Twyman Interferometer. (E) E. V. Sidnenko and I. S. Zheludev. 12, 397 (1967) [12, 465 (1967)]
Growth of Large Hematite Crystals from Solution in a Bi_2O_3–Na_2CO_3 (Flux) Melt. (E) R. A. Voskanyan and I. S. Zheludev. 12, 473 (1967) [12, 539 (1967)]
The Spontaneous Electrooptical Effect in Tetragonal $BaTiO_3$. (E) I. S. Zheludev, E. V. Sidnenko, and S. I. Teplyakova. 12, 528 (1968) [12, 604 (1967)]
Elastic, Piezoelectric, and Pyroelectric Properties of Barium Nitrite Single Crystals. (E) V. V. Gladkii and I. S. Zheludev. 12, 788 (1968) [12, 905 (1967)]

ZHEREBTSOVA, L. I.
Hindered Motion and Phase Transitions in the Propionates. (E/T) I. P. Aleksandrova, L. I. Zherebtsova, and K. S. Aleksandrov. 12, 780 (1968) [12, 894 (1967)]

ZHITAR', V. F.
Crystal Structure of $Zn_3In_2S_6$. (E) F. G. Donika, G. A. Kiosse, S. I. Radautsan, S. A. Semiletov, and V. F. Zhitar'. 12, 745 (1968) [12, 854 (1967)]

ZHUKOVA, T. B.
Study of the Phase Transformation and Structure of α-GeTe. (E) T. B. Zhukova and A. I. Zaslavskii. 12, 28 (1967) [12, 37 (1967)]

ZINOV'EVA, V. P.
Selective Etching of Indium Antimonide Single Crystals in a Hydrochloric Acid Solution of Ferric Chloride. (E) V. N. Vertoprakhov and V. P. Zinov'eva. 12, 822 (1968) [12, 944 (1967)]

ZONSHAIN, E. M.
Structure of Dislocation Kinks and Steps in the Germanium Lattice. (E) A. N. Orlov and E. M. Zonshain. 12, 831 (1968) [12, 951 (1967)]

ZORIN, E. I.
Amorphization of Polycrystalline Germanium Films on Irradiation with Argon Ions. (E) P. V. Pavlov, D. I. Tetel'baum, E. I. Zorin, and R. V. Kudryavtseva. 12, 134 (1967) [12, 155 (1967)]

ZORKII, P. M.
The Structure of Molecular Crystals. II. A Complete Calculation of the Close-Packed Arrays of Planar Molecules in Layers. (T/E) P. M. Zorkii and M. A. Porai-Koshits. 12, 863 (1968) [12, 989 (1967)]

ZUBKOVA, F. M.
A Continuous Laser Based on $Y_3Al_5O_{12}$–Nd^{3+} and Working at 300°K. (E) Kh. S. Bagdasarov, F. M. Zubkova, A. A. Kaminskii, A. M. Kevorkov, and V. Ya. Khaimov-Mal'kov. 12, 304 (1967) [12, 358 (1967)]

ZUBOV, V. G.
Growth of Hexagonal Zinc Sulfide and Investigation of Some of Its Physical Properties. (E) V. G. Zubov, L. A. Sysoev, and M. M. Firsova. 12, 67 (1967) [12, 84 (1967)]
Elasticity of Quartz Irradiated with Fast Neutrons. (E) V. G. Zubov and A. T. Ivanov. 12, 313 (1967) [12, 365 (1967)]

ZVONKOVA, Z. V.
Crystal Structure of Zinc and Lead Diethyldithiocarbamates. (E) Z. V. Zvonkova, A. N. Khvatkina, and N. S. Ivanova. 12, 926 (1968) [12, 1065 (1967)]

ZVYAGIN, B. B.
Polytypism in Molybdenite. (T) B. B. Zvyagin and S. V. Soboleva. 12, 46 (1967) [12, 57 (1967)]

ZYKALOVA, K. A.
Crystallographic Study of the Iodohydrate of Gramicidine C. (E) G. N. Tishchenko, K. A. Zykalova, and A. I. Grebenko. 12, 758 (1968) [12, 868 (1967)]

SOVIET PHYSICS – CRYSTALLOGRAPHY
Volume 12, 1967
A translation of Kristallografiya

Crystal Optics

Electrooptical Properties of Crystals
Spectroscopic Studies of Crystals
The Study of Crystals by Optical Methods

Crystal Structures–Atomic Arrangements

Apparatus for Structure Studies
Computing Methods Involving Structures
Heavy-Atom Methods
Metals and Alloys (X-Ray Diffraction, Electron Diffraction)
Minerals (Except Silicates)
Neutron Diffraction Studies
Organic Compounds
Resonance Methods
Scattering Methods
Silicates
Simple and Binary Inorganic Compounds (Electron Diffraction)
Simple and Binary Inorganic Compounds (X-Ray Diffraction)
Ternary and More Complicated Inorganic Compounds (X-Ray Diffraction)

Crystallographic Physical Chemistry

Chemical Binding in Crystals
Phase Changes, Constitution Diagrams

Electrical Properties of Crystals
Electrical Properties of Linear Dielectrics
Structures and Electrical Properties of Ferroelectrics, Piezoelectrics, Pyroelectrics

Magnetic Properties of Crystals
Mechanical Properties of Crystals

Elasticity of Crystals, Internal Friction
Microhardness and Dislocation Rosettes
Plastic Deformation
Twinning

Optical Properties of Crystals

Production of Crystals

Apparatus for Studying the Growth of Crystals. Grinding, Cutting, and Other Shaping of Crystals
Crystallization from the Gas Phase
Crystallization from the Melt
Crystallization from the Solution
Etching of Crystals
External Morphology
Growing of Crystals
Impurities (Trapping of Impurities, and Their Influence on Growth Kinetics)

Scientific News Items

Structures of Real Crystals

Imperfections, Special Diffraction Methods for: Degree of Dispersion, Distortion, Mozaicity, Concentration Inhomogeneity, etc. (See also: Theory of Scattering)
Studies of Dislocations and the Dislocation Structures of Crystals

Theoretical Crystallography

Antisymmetry
Other Generalizations of Symmetry (Except Antisymmetry)
Symmetry
Theory of Crystal Growth, Theory of Dislocations
Theory of Crystal Structure Determination
Theory of the Scattering of X-Rays, Electrons, and Neutrons
Theory of the Solid State

Thermal and Thermodynamic Properties

Thin Films

Semiconducting Films, Magnetic Films, etc., Their Preparation and Physical Properties (See also: The Structures of Inorganic Compounds, Electron Diffraction)

CRYSTAL OPTICS

Electrooptical Properties of Crystals

Some General Properties of the Nonlinear Polarizability Tensor of Crystals. (T) F. I. Fedorov. 12, 233 (1967) [12, 281 (1967)]

Electrooptical Properties of Triglycine Sulfate. III. (E) A. S. Vasilevskaya and A. S. Sonin. 12, 248 (1967) [12, 297 (1967)]

Electrooptical Effect in Triglycine Sulfate Crystals at Room Temperature. (E) I. T. Tukhtasunov, V. A. Shamburov, and I. S. Zheludev. 12, 252 (1967) [12, 302 (1967)]

Some Physical Properties of Deuterated Potassium Dihydrogen Phosphate Single Crystals in the Paraelectric Phase. (E) A. S. Vasilevskaya, S. S. Gorbach, M. F. Koldobskaya, L. I. Kuznetsova, L. G. Lomova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 308 (1967) [12, 361 (1967)]

Temperature and Wavelength Dependences of the Electrooptical Coefficient r_{63} in ADP Crystals. (E) O. G. Blokh and L. F. Lutsiv-Shumskii. 12, 380 (1967) [12, 443 (1967)]

Some Physical Properties of Rubidium Dihydrogen Phosphate Single Crystals. (E) A. S. Vasilevskaya, M. F. Koldobskaya, L. G. Lomova, V. P. Popova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 383 (1967) 12, 447 (1967)]

Electrooptical Properties of Triglycine Sulfate. IV. Deuterated Triglycine Sulfate. (E) A. S. Sonin and A. S. Vasilevskaya. 12, 386 (1967) [12, 451 (1967)]

Spontaneous Electrooptical Effect in Rochelle Salt Crystals. (E) O. G. Blokh and L. F. Lutsiv-Shumskii. 12, 389 (1967)[12, 455 (1967)]

Electrooptical Properties of Rochelle Salt. (E) A. T. Anistratov and K. S. Aleksandrov. 12, 392 (1967) [12, 459 (1967)]

Measurement of the Electromechanical and Electrooptical Coefficients of an ADP Single Crystal Using a Twyman Interferometer. (E) E. V. Sidnenko and I. S. Zheludev. 12, 397 (1967) [12, 465 (1967)]

The Spontaneous Electrooptical Effect in Tetragonal $BaTiO_3$. (E) I. S. Zheludev, E. V. Sidnenko, and S. I. Teplyakova. 12, 528 (1968) [12, 604 (1967)]

The Quadratic Electrooptic Effect in Single Crystals of Ammonium Dihydrogen Phosphate. (E) V. É. Perfilova. 12, 621 (1968) [12, 715 (1967)]

Spectroscopic Studies of Crystals

Anomalous Pleochroism in Synthetic Smoky Quartz Crystals. (E/T) L. I. Tsinober, M. I. Samoilovich, L. A. Gordienko, and L. G. Chentsova. 12, 53 (1967) [12, 65 (1967)]

Spectral Investigations of Thermoluminescence in Quartz Containing Additions of Aluminum and Germanium by Fourier Spectrometry. (E) I. P. Petrov. 12, 117 (1967) [12, 144 (1967)]

An Example of Optical Pseudouniaxiality: Preobrazhenskite. (E) V. B. Tatarskii. 12, 302 (1967) [12, 356 (1967)]

Color of Synthetic Tourmaline Crystals Containing Iron. (E) I. E. Voskresenskaya and S. V. Grum-Grzhimailo. 12, 311 (1967) [12, 363 (1967)]

A Preliminary Model of the Benzophenone Structure. (E) E. B. Vul and G. M. Lobanova. 12, 355 (1967) [12, 411 (1967)]

Spontaneous Electrooptical Effect in Rochelle Salt Crystals. (E) O. G. Blokh and L. F. Lutsiv-Shumskii. 12, 389 (1967) [12 455 (1967)]

The Study of Crystals by Optical Methods

Growth of Hexagonal Zinc Sulfide and Investigation of Some of Its Physical Properties. (E) V. G. Zubov, L. A. Sysoev, and M. M. Firsova. 12, 67 (1967) [12, 84 (1967)]

Preparation, Structure, and Some Photoelectric Properties of Single and Multilayer Monocrystalline Chalcogenide Films of the Types $A^{II}B^{VI}$ and $A^{IV}B^{VI}$. (E) L. A. Sergeeva, I. P. Kalinkin and V. B. Aleskovskii. 12, 90 (1967) [12, 113 (1967)]

Etch Polishing of Germanium by Means of Gaseous Hydrogen Sulfide. (E) L. L. Vasil'eva and S. V. Pokrovskaya. 12, 127 (1967) [12, 150 (1967)]

Group-Theoretical Analysis and Basis Vectors of the Long-Wavelength Normal Vibrations of Crystals with the KH_2PO_4 Structure below the Curie Point. (T) M. S. Shur. 12, 181 (1967) [12, 215 (1967)]

Influence of Block Structure and Slip Planes on the Divergence of the Laser Radiation of Ruby Crystals. (E/T) E. M. Akulenok, Kh. S. Bagdasarov, V. S. Papkov, and V. Ya. Khaimov-Mal'kov. 12, 237 (1967) [12, 286 (1967)]

Experimental Investigation of the Rotation of the Plane of Polarization of Light in Dithionate Crystals. (E/T) L. M. Belyaev and Z. B. Perekalina. 12, 243 (1967) [12, 291 (1967)]

A Precise Polarimeter and Its Application to Study of Changes of the Rotation of the Polarization Plane of Light and the Rotational Electrooptic Effect in Ferroelectrics. (E) N. R. Ivanov, L. A. Shuvalov, A. V. Mirenskii, and G. D. Shnyrev. 12, 256 (1967) [12, 307 (1967)]

A Continuous Laser Based on $Y_3Al_5O_{12}$–Nd^{3+} and Working at 300°K. (E) Kh. S. Bagdasarov, F. M. Zubkova, A. A. Kaminskii, A. M. Kevorkov, and V. Ya. Khaimov-Mal'kov. 12, 304 (1967) [12, 358 (1967)]

Application of Ultrathin Sections in the Electron Microscope Examination of Minerals. (E) G. I. Distler, R. V. Boyarskaya, and N. M. Borisova. 12, 329 (1967) [12, 378 (1967)]

RAl_3 Compounds in Rare Earth–Aluminum Systems and Their Crystal Structures. (E) I. I. Zalutskii and P. I. Kripyakevich. 12, 341 (1967) [12, 394 (1967)]

Optical Study of the Phase Composition of Barium Titanate with Small Additions of Chromium Oxide. (E) T. N. Verbitskaya and T. N. Burakova. 12, 375 (1967) [12, 436 (1967).

Some Physical Properties of Rubidium Dihydrogen Phosphate Single Crystals. (E) A. S. Vasilevskaya, M. F. Koldobskaya, L. G. Lomova, V. P. Popova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov. 12, 383 (1967) [12, 447 (1967)]

Effect of Temperature on the Scattering of Light by Liquid Crystals of the Cholesterol Type. (E) A. P. Kapustin. 12, 443 (1967) [12, 516 (1967)]

Crystallo-Optical Properties of Vanadates of Alkali Metals of the MeV_2O_6 Type. (E) M. P. Glazyrin. 12, 444 (1967) [12, 516 (1967).

Conoscopy of Elongated Capron Monofilaments. (E) M. A. Genina and N. Ya. Onishchenko. 12, 475 (1967) [12, 540 (1967)]

Polymorphous Single Crystal–Single Crystal Transition in Silver Nitrate. (E) Yu. G. Asadov. 12, 537 (1968) [12, 616 (1967)]

Substructure of Single Crystals of a Cobalt–Iron Alloy. (E) V. P. Ovcharov, N. N. Geveling, and V. P. Makarov. 12, 652 (1968) [12, 738 (1967)]

Crystal Structure of $Zn_3In_2S_6$. (E) F. G. Donika, G. A. Kiosse, S. I. Radautsan, S. A. Semiletov, and V. F. Zhitar'. 12, 745 (1968) [12, 854 (1967)]

The Crystal Structure of Catalase. (E) B. K. Vainshtein, V. V. Barynin, G. V. Gurskaya, and V. Ya. Nikitin. 12, 750 (1968) [12, 860 (1967)]

Crystallographic Study of the Iodohydrate of Gramicidine C. (E) G. N. Tishchenko, K. A. Zykalova, and A. I. Grebenko. 12, 758 (1968) [12, 868 (1967)]

Electron-Microscopic Investigation of the Structure of Tetragonal Barium Titanate. (E) G. L. Platonov, Yu. Ya. Tomashpol'skii, Yu. N. Venevtsev, and G. S. Zhdanov. 12, 808 (1968) 12, 933 (1967)]

Observing the Recrystallization of Thin Gold Films in the Electron Microscope. (E) Gl. S. Zhdanov and V. N. Vertsner. 12, 829 (1968) [12, 949 (1967)]

Effect of Light Pulses on the Dislocation Structure of Sodium Chloride. (E/T) T. M. Aver'yanova, L. I. Mirkin, and N. F. Pilipetskii. 12, 889 (1968) [12, 1022 (1967)]

Use of Unsymmetrical Photographs to Investigate Dislocations in Germanium by the Borrmann Method. (E) L. V. Tikhonov and G. V. Khar'kova. 12, 951 (1968) [12, 1086 (1967)]

X-Ray Investigation of Some Peculiarities of the Impurity Distribution in Strongly-Doped Silicon Single Crystals. (E) V. G. Fomin and M. G. Mil'vidskii. 12, 955 (1968) [12, 1089 (1967)]

Surface Structure of Negative Crystals (Pores) in Molybdenum. (E) G. A. Klein and V. A. Krakhmalev. 12, 964 (1968) [12, 1096 (1967)]

Diffraction of Slow Electrons: A Method of Studying the Atomic Structure of Surfaces. (R) V. F. Dvoryankin and A. Yu. Mityagin. 12, 982 (1968) [12, 1112 (1967)]

CRYSTAL STRUCTURES–ATOMIC ARRANGEMENTS

Apparatus for Structure Studies

A Precise Polarimeter and Its Application to Study of Changes of the Rotation of the Polarization Plane of Light and the Rotational Electrooptic Effect in Ferroelectrics. (E) N. R. Ivanov, L. A. Shuvalov, A. V. Mirenskii, and G. D. Shnyrev. 12, 256 (1967) [12, 307 (1967)]

X-Ray Diffraction Method of Determining Substructure. (T/E) B. Ya. Pines, E. E. Badiyan, A. F. Sirenko, and D. D. Solnyshkin. 12, 365 (1967) [12, 423 (1967)]

Measurement of the Electromechanical and Electrooptical Coefficients of an ADP Single Crystal Using a Twyman Interferometer. (E) E. V. Sidnenko and I. S. Zheludev. 12, 397 (1967) [12, 465 (1967)]

Healing of Cracks in Rock Salt Crystals. (E) Yu. V. Grdina and V. V. Neverov. 12, 421 (1967) [12, 493 (1967)]

Helium Cryostat for a Neutron Diffractometer. (E) V. S. Golovkin, V. N. Bykov, N. V. Khoteev, and V. A. Levdik. 12, 477 (1967) [12, 542 (1967)]

An Automatic Equinclination Diffractometer for Single Crystals. (E) D. M. Kheiker, É. L. Lube, A. V. Mirenskii, N. I. Komyak, O. V. Maklakov, L. Z. Tatkin, É. N. Gurevich, and V. S. Rogachev. 12, 802 (1968) [12, 924 (1967)]

A Small Crystal Neutron Spectrometer for Studies on Crystal Dynamics. (E) V. V. Gorbachev and V. I. Platonov. 12, 978 (1968) [12, 1108 (1967)]

Computing Methods Involving Structures

Calculation of Complex Distributions and Weighted Projections of the Electron Density. (T) V. I. Burdina. 12, 192 (1967) [12, 230 (1967)]

Electron-Diffraction Determination of the Crystal Structure of the Hexagonal β^1 Phase in the Cu–Te System. (E/T) R. V. Baranova. 12, 221 (1967) [12, 266 (1967)]

Convergence Problems in Crystal Structure Refinement by the Least Squares Method. (E/T) R. A. Brusentsev. 12, 337 (1967) [12, 389 (1967)]

Program for Calculation of Interplanar Spacings in the ALGOL-60 Language. (E) F. A. Brusentsev and A. N. Rebenko. 12, 434 (1967) [12, 510 (1967)]

A Program for Obtaining a Set of Integrated Intensities with a Nonautomatic X-Ray Diffractometer. (T) É. L. Lube, L. A. Butman, and D. M. Kheiker. 12, 614 (1968) [12, 710 (1967)]

Heavy-Atom Methods

Crystal Structure of the Modifications of p-Bromodiazoaniline. (E) Yu. A. Omel'chenko and Yu. D. Kondrashev. 12, 359 (1967) [12, 416 (1967)]

Reflection of Atomic Beams from the Surface of Single Crystals. (E) L. D. Raigorodskii. 12, 452 (1967) [12, 522 (1967)]

Metals and Alloys (X-Ray Diffraction, Electron Diffraction)

Calculation of the Crystallographic Directions on Electron Photomicrograms. (E/T) Yu. A. Tuman'yan and M. I. Zakharova. 12, 22 (1967) [12, 29 (1967)]

The Possibility of the Existence of a Singular Triple Point on the Pressure–Temperature Diagram of an Iron–Rhodium Alloy. (E) E. G. Ponyatovskii, A. R. Kut-sar, and G. T. Dubovka. 12, 63 (1967) [12, 79 (1967)]

Some Structural and Electrical Properties of Lead Sulfide Films. (E) R. V. Kudryavtseva, S. A. Semiletov, and G. I. Perevezentseva. 12, 86 (1967) [12, 109 (1967)]

Preparation, Structure, and Some Photoelectric Properties of Single- and Multilayer Monocrystalline Chalcogenide Films of the Types $A^{II}B^{VI}$ and $A^{IV}B^{VI}$. (E) L. A. Sergeeva, I. P. Kalinkin, and V. B. Aleskovskii. 12, 90 (1967) [12, 113 (1967)]

Determination of Patterns of Macromosaic Substructure in Metal Single Crystals by X-Ray Diffraction Microscopy. (E) V. O. Esin and T. V. Ushkova. 12, 108 (1967) [12, 136 (1967)]

Structure of Uranium in Thin Films. (E) L. D. Kolomiets. 12, 132 (1967) [12, 154 (1967)]

Crystalline Structures of Some Compounds in the Nb–Ni and Ta–Ni Systems. (E) P. I. Kripyakevich and E. N. Pylaeva. 12, 294 (1967) [12, 350 (1967)]

Electron-Diffraction Study of Surface Diffusion in the Copper–Nickel and Copper–Silver Systems. (E) B. Ya. Pines, I. P. Grebennik, and I. V. Gektina. 12, 556 (1968) [12, 639 (1967)]

Studies of the Subgrain Structure of Curved Aluminum Crystal Analyzers of X-Ray Spectrographs. (E) I. B. Staryi and A. A. Khanonkin. 12, 633 (1968) [12, 724 (1967)]

Some Problems in the Geometry of Diffraction Patterns from Slow Electrons. (T/E) V. F. Dvoryankin and A. Yu. Mityagin. 12, 845 (1968) [12, 966 (1967)]

Structure of Ultrathin Films Produced by Vacuum Evaporation of Tantalum and Iridium. (E) D. I. Lainer and V. A. Kholmyanskii. 12, 913 (1968) [12, 1051 (1967)]

X-Ray Investigation of Some Peculiarities of the Impurity Distribution in Strongly-Doped Silicon Single Crystals. (E) V. G. Fomin and M. G. Mil'vidskii. 12, 955 (1968) [12, 1089 (1967)]

Diffuse Scattering of X-Rays by Gamma-Irradiated Metals. (E) I. A. Malinenko and O. N. Shivrin. 12, 958 (1968) [12, 1091 (1967)]

Minerals (Except Silicates)

The Garnet Pattern in the Structure of Iron Molybdate. (T/E) L. M. Plyasova, S. V. Borisov, and N. V. Belov. 12, 25 (1967) [12, 33 (1967)]

Crystal Structure of Thorolite, $Sn(Ta, Nb)_2O_7$. (E) N. V. Maksimova and V. Ilyukhin. 12, 105 (1967) [12, 133 (1967)]

Crystal Structure of Burbankite. (E) A. A. Voronkov, N. G. Shumyatskaya, and Yu. A. Pyatenko. 12, 107 (1967) [12, 135 (1967)]

Dielectric Properties of $SrTiO_3$ Crystals, Pure and Doped with Iron and Chromium. (E) B. N. Matsonashvili. 12, 534 (1968) [12, 612 (1967)]

Method for the Quantitative Evaluation of the Macroscopic Block Structure (Nonsingle-Crystallinity) of Corundum. (E) I. A. Bass and S. D. Krasnenkova. 12, 631 (1968) [12, 723 (1967)]

Characteristics of the Crystal Structure of Rinkite. (E) V. I. Simonov and N. V. Belov. 12, 740 (1968) [12, 848 (1967)]

A New Structural Type in the Molybdates and Tungstates of Trivalent Metals. (E) L. M. Plyasova, R. F. Klevtsova, S. V. Borisov, and L. M. Kefeli. 12, 816 (1968) [12, 939 (1967)]

Electrical and Optical Properties of $BaTiO_3$ Crystals Doped with Iron and Cobalt. (E) B. N. Matsonashvili. 12, 867 (1968) [12, 995 (1967)]

Preliminary Data on the Crystal Structure of Magnesium Molybdate. (E) V. I. Pakhomov and A. V. Medvedev. 12, 925 (1968) [12, 1064 (1967)]

Causes of the Predominance of Left-Handed Forms of Epsomite. (E) É. D. Rogacheva. 12, 961 (1968) [12, 1093 (1967)]

Neutron Diffraction Studies

Positions of Co^{2+} Ions in the Hexagonal Ferrites of the System $BaCO_X^{2+}Fe_{2-X}^{3+}Fe_{16}^{3+}O_{27}(Co_XW)$. (E) R. A. Sizov and I. I. Yamzin. 12, 111 (1967) [12, 138 (1967)]

Determination of the Oxygen Parameter and Degree of Inversion of Manganese Vanadate by Neutron Diffraction. (E) Yu. S. Kuz'minov. 12, 811 (1968) [12, 935 (1967)]

Organic Compounds

Crystalline and Molecular Structure of 1,5-Difluoroanthraquinone. (E) L. A. Chetkina. 12, 33 (1967) [12, 42 (1967)]

Temperature Dependence of the Generalized Grüneisen Tensor for an Orgnic Crystal. (T/E) A. I. Kitaigorodskii, B. D. Koreshkov, and V. F. Teslenko. 12, 292 (1967) [12, 349 (1967)]

Electron Diffraction Determination of the Structure for the Lamellar Copper Glycinate Monohydrate Phase. (E) B. K. Vainshtein, I. A. D'yakon, and A. V. Ablov. 12, 299 (1967) [12, 354 (1967)]

Symmetry of Modification II of Gramicidin-C Hydrochloride Crystals. (T/E) E. V. Dornberger-Schiff and G. N. Tishchenko. 12, 301 (1967) [12, 355 (1967)]

Least-Squares Refinement of the Crystal Structures of 1,5-Dibromo- and 1,5-Diiodoanthraquinone. (E) L. A. Chetkina and G. A. Gol'der. 12, 349 (1967) [12, 404 (1967)]

A Preliminary Model of the Benzophenone Structure. (E) E. B. Vul and G. M. Lobanova. 12, 355 (1967) [12, 411 (1967)]

Crystal Structure of the Modifications of p-Bromodiazoaniline. (E) Yu. A. Omel'chenko and Yu. D. Kondrashev. 12, 359 (1967) [12, 416 (1967)]

Ferroelectric Response of Tetramethylammonium Triiodomercurate. (E) V. A. Gerken, V. I. Pakhomov, A. S. Sonin, E. I. Marchenko, and V. N. Nepomnyashchaya. 12, 531 (1968) [12, 607 (1967)]

Determination of the Interfacial Energy at the Boundary between the Solid and Liquid-Crystal Phases of Para-Azoxyanisole and Cholesteryl Caprinate. (E/T) F. K. Gorskii and N. M. Sakevich. 12, 586 (1968) [12, 674 (1967)]

Studies on Organic Chemical Crystallography in the USSR. (R) A. I. Kitaigorodskii. 12, 692 (1968) [12, 786 (1967)]

The Crystal Structure of Catalase. (E) B. K. Vainshtein, V. V. Barynin, G. V. Gurskaya, and V. Ya. Nikitin. 12, 750 (1968) [12, 860 (1967)]

Study of the Structure of Nematic p-Azoxyanisole in Magnetic Fields. (E) I. G. Chistyakov and V. M. Chaikovskii. 12, 770 (1968) [12, 883 (1967)]

Hindered Motion and Phase Transitions in the Propionates. (E/T) I. P. Aleksandrova, L. I. Zherebtsova, and K. S. Aleksandrov. 12, 780 (1968) [12, 894 (1967)]

The Structure of Molecular Crystals. II. A Complete Calculation of the Close-Packed Arrays of Planar Molecules in Layers. (T/E) P. M. Zorkii and M. A. Porai-Koshits. 12, 863 (1968) [12, 989 (1967)]
Crystal Structure of Zinc and Lead Diethyldithiocarbamates. (E) Z. V. Zvonkova, A. N. Khvatkina, and N. S. Ivanova. 12, 926 (1968) [12, 1065 (1967)]

Resonance Methods

Calculation of Internal Electric Fields and Their Gradients in Ferrimagnetic $BiFeO_3$. (T) Yu. Ya. Tomashpol'skii and Yu. N. Venevtsev. 12, 18 (1967) [12, 24 (1967)]
Nuclear Magnetic Resonance Study of Ruby Single Crystals. (E) V. S. Pavlovskaya, V. F. Belov, M. D. Kapustina, A. N. Asabin, and V. Ya. Khaimov-Mal'kov. 12, 41 (1967) [12, 51 (1967)]
Anomalous Pleochroism in Synthetic Smoky Quartz Crystals. (E/T) L. I. Tsinober, M. I. Samoilovich, L. A. Gordienko, and L. G. Chentsova. 12, 53 (1967) [12, 65 (1967)]
Nuclear Magnetic Resonance in Sodium Hydroselenite Single Crystals. (E) G. V. Gavrilova-Podol'skaya, S. P. Gabuda, and A. G. Lundin. 12, 114 (1967) [12, 141 (1967)]
Phase Transitions in Molecular Crystals of C_4Cl_3F and C_3Br_3F. (E) T. A. Babushkina, V. M. Kozhin, V. I. Robas, I. A. Safin, G. K. Semin, and T. L. Khotsyanova. 12, 116 (1967) [12, 143 (1967)]
Synthesis of Otavite Crystals and Observation of the EPR Spectra of Co^{+2} Ions in Them. (E) A. S. Borovik-Romanov, N. Yu. Ikornikova, V. F. Meshcheryakov, and E. G. Rudashevskii. 12, 417 (1967) [12, 488 (1967)]

Scattering Methods

Determination of Elementary Fiber Dimensions in Chrysotile Asbestos. (E/T) D. M. Kheiker, I. M. Plantsbaum, and L. V. Bubeleva. 12, 370 (1967) [12, 430 (1967)]
Frequency Dependence of the Intensity of Raman Scattering in α-Quartz. (E) D. F. Kiselev. 12, 936 (1968) [12, 1073 (1967)]

Silicates

Structural Analysis and Chemical Crystallography of Silicates in the USSR. (R) N. V. Belov. 12, 684 (1968) [12, 775 (1967)]

Simple and Binary Inorganic Compounds (Electron Diffraction)

Polytypism in Molybdenite. (T) B. B. Zvyagin and S. V. Soboleva. 12, 46 (1967) [12, 57 (1967)]
Electron Diffraction Investigation of the Structure of SiO_2 Films Obtained by Different Methods. (E) P. V. Pavlov and É. V. Shitova. 12, 95 (1967) [12, 119 (1967)]
Amorphization of Polycrystalline Germanium Films on Irradiation with Argon Ions. (E) P. V. Pavlov, D. I. Tetel'baum, E. I. Zorin, and R. V. Kudryavtseva. 12, 134 (1967) [12, 155 (1967)]
A Method of Producing Films Homogeneous in Composition from $A^{III}B^{V}$ Semiconducting Compounds. (E) M. D. Uspenskii. 12, 142 (1967 [12, 162 (1967)]
Electron-Diffraction Determination of the Crystal Structure of the Hexagonal β^{I} Phase in the Cu–Te System. (E/T) R. V. Baranova. 12, 221 (1967) [12, 266 (1967)]
Determination of the Coherent Intensity and Background Intensity from the Observed Electron-Scattering Curve. (T/E) I. D. Nabitovich, Ya. I. Stetsiv, and Ya. V. Voloshchuk. 12, 513 (1968) [12, 584 (1967)]
Structure of Thin Indium Arsenide Films Prepared by Discrete Evaporation. (E) V. A. Vlasov and S. A. Semiletov. 12, 761 (1968) [12, 871 (1967)]
Electron-Diffraction Investigation of Thin CdS Films. (E) B. D. Galkin, N. V. Troitskaya, and R. D. Ivanov. 12, 766 (1968) [12, 878 (1967)]
Electron-Diffraction Study of Tantalum Dioxide in Thin Films. (E) V. I. Khitrova, V. V. Klechkovskaya, and Z. G. Pinsker. 12, 907 (1968) [12, 1044 (1967)]

Simple and Binary Inorganic Compounds (X-Ray Diffraction)

Study of the Phase Transformation and Structure of α-GeTe. (E) T. B. Zhukova and A. I. Zaslavskii. 12, 28 (1967) [12, 37 (1967)]
Polytypism in Molybdenite. (T) B. B. Zvyagin and S. V. Soboleva. 12, 46 (1967) [12, 57 (1967)]
RAl_2 Compounds in Rare Earth–Aluminum Systems and Their Crystal Structures. (E) I. I. Zalutskii and P. I. Kripyakevich. 12, 341 (1967) [12, 394 (1967)]
Study of X-Ray Diffraction Images of Some Dislocations Generated in the Plastic Deformation of Germanium. (E) L. I. Datsenko and M. Ya. Skorokhod. 12, 409 (1967) [12, 480 (1967)]
W_4Fe_7-Type Compounds in the Nb–Fe, Ta–Fe, and Ta–Co Systems. (E) P. I. Kripyakevich, E. I. Gladyshevskii, and R. V. Skolozdra. 12, 535 (1968) [12, 600 (1967)]
Polymorphous Single Crystal–Single Crystal Transition in Silver Nitrate. (E) Yu. G. Asadov. 12, 537 (1968) [12, 616 (1967)]
Extinction Effects in Aluminum Single Crystals. (E) O. M. Kozlov and A. V. Kuznetsov. 12, 544 (1968) [12, 626 (1967)]
Regarding the Determination of Block Size from Extinction Effects. (E) G. M. Vorob'ev and L. I. Kotova. 12, 548 (1968) [12, 631 (1967)]
Heteroepitaxy of Molybdenum on Tungsten from the Liquid State. (E) Yu. D. Chistyakov, A. I. Pekarev, and M. V. Gartman. 12, 597 (1968) [12, 688 (1967)]
Crystallization Mechanism of Selenium. (E/T) K. P. Mamedov and Z. D. Nurieva. 12, 605 (1968) [12, 698 (1967)]
New Compounds of the $MgZn_2$ Type in Systems of Rare-Earth Metals with Rhenium. (E) E. E. Cherkashin, M. Yu. Teslyuk, and D. P. Frankevich. 12, 617 (1968) [12, 712 (1967)]
Synthesis and X-Ray Examination of Single Crystals of $NaMF_3$ Type. (E) A. G. Tutov and P. P. Syrnikov. 12, 619 (1968) [12, 713 (1967)]
Structure of Thin Indium Arsenide Films Prepared by Discrete Evaporation. (E) V. A. Vlasov and S. A. Semiletov. 12, 761 (1968) [12, 871 (1967)]
Orthorhombic Modifications of the Compounds W_2C and Mo_2C. (E) V. S. Telegus, E. I. Gladyshevskii, and P. I. Kripyakevich 12, 813 (1968) [12, 936 (1967)]
Polymorphism of Lead Oxide Single Crystals. (E) G. A. Bordovskii and V. A. Izvozchikov. 12, 818 (1968) [12, 940 (1967)]
X-Ray Phase Analysis of the Erbium–Hydrogen System. (E) Z. M. Azarkh and P. I. Gavrilov. 12, 932 (1968) [12, 1070 (1967)]

Ternary and More Complicated Inorganic Compounds (X-Ray Diffraction)

Crystal Structure of Thorolite, $Sn(Ta, Nb)_2O_7$. (E) N. V. Maksimova and V. V. Ilyukhin. 12, 105 (1967) [12, 133 (1967)]
Crystal Structure of Burbankite. (E) A. A. Voronkov, N. G. Shumyatskaya, and Yu. A. Pyatenko. 12, 107 (1967) [12, 135 (1967)]
X-Ray Diffraction Study of the Atomic Structure of Ferromagnetic $BiFeO_3$. (E) Yu. Ya. Tomashpol'skii, Yu. N. Venevtsev, and G. S. Zhdanov. 12, 209 (1967) [12, 252 (1967)]
X-Ray Diffraction Study of the Atomic Structure of Stillwellite $CeBO[SiO_4]$. (E) A. A. Voronkov and Yu. A. Pyatenko. 12, 214 (1967) [12, 258 (1967)]
New Compounds with Structure of the Type $W_5Cr_{21}C_8$. (E) Yu. B. Kuz'ma and Yu. V. Voroshilov. 12, 297 (1967) [12, 353 (1967)]
Determination of Elementary Fiber Dimensions in Chrysotile Asbestos. (E/T) D. M. Kheiker, I. M. Plantsbaum, and L. V. Bubeleva. 12, 370 (1967) [12, 430 (1967)]
Optical Study of the Phase Composition of Barium Titanate with Small Additions of Chromium Oxide. (E) T. N. Verbitskaya and T. N. Burakova. 12, 375 (1967) [12, 436 (1967)]
X-Ray and Electrical Studies of the System $Bi_4Ti_3O_{12}$–$BiFeO_3$. (E) I. G. Ismailzade, V. I. Nesterenko, F. A. Mirishli, and P. G. Rustamov. 12, 400 (1967) [12, 468 (1967)].
Crystal Structure of $SrMoO_4$. (E) Yu. K. Egorov-Tismenko, M. A. Simonov, and N. V. Belov. 12, 436 (1967) [12, 511 (1967)]

X-Ray Study of the Sodium-Iron Metagermanate $NaFeGe_2O_6$. (E) L. P. Solov'eva and V. V. Bakakin. 12, 517 (1968) [12, 591 (1967)]

X-Ray-Diffraction Determination of the Oxygen Parameter of Ferrites with the Spinel Structure from the "Forbidden" Reflections (442) and (644). (E) D. M. Mazo. 12, 521 (1968) [12, 595 (1967)]

Structure of Al–Cu–Mg Alloy in the Initial Stages of Aging. (E) T. V. Shchegoleva and N. N. Bulnov. 12, 552 (1968) [12, 635 (1967)]

Estimate of Resolving Power and Choice of Optimum Exposure Conditions in the Determination of the Substructure Characteristics of Polycrystals from the Widths of Their X-Ray Reflections. (T) D. N. Shivrin. 12, 629 (1968) [12, 721 (1967)]

Studies on Organic Chemical Crystallography in the USSR (R) A. I. Kitaigorodskii. 12, 692 (1968) [12, 786 (1967)]

Crystal Structure of $Zn_3In_2S_6$. (E) F. G. Donika, G. A. Kiosse, S. I. Radautsan, S. A. Semiletov, and V. F. Zhitar'. 12, 745 (1968) [12, 854 (1967)]

The Crystal Structure of Pyrosmalite. (E) A. A. Kashaev. 12, 923 (1968) [12, 1062 (1967)]

Ternary Compounds in the Zr–H–C and Zr–H–N Systems. (E) R. A. Andrievskii, E. B. Boiko, and V. P. Kalinin. 12, 930 (1968) [12, 1068 (1967)]

CRYSTALLOGRAPHIC PHYSICAL CHEMISTRY

Chemical Binding in Crystals

Crystalline and Molecular Structure of 1,5-Difluoroanthraquinone. (E) L. A. Chetkina. 12, 33 (1967) [12, 42 (1967)]

Least-Squares Refinement of the Crystal Structures of 1,5-Dibromo- and 1,5-Diiodoanthraquinone. (E) L. A. Chetkina and G. A. Gol'der. 12, 349 (1967) [12, 404 (1967)]

Phase Changes, Constitution Diagrams

Study of the Phase Transformation and Structure of α-GeTe. (E) T. B. Zhukova and A. I. Zaslavskii. 12, 28 (1967) [12, 37 (1967)]

The Possibility of the Existence of a Singular Triple Point on the Pressure–Temperature Diagram of an Iron–Rhodium Alloy. E. G. Ponyatovskii, A. R. Kut-sar, and G. T. Dubovka. 12, 63 (1967) [12, 79 (1967)]

Phase Transitions in Molecular Crystals of C_6Cl_6F and C_6Br_6F. (E) T. A. Babushkina, V. M. Kozhin, V. I. Robas, I. A. Safin, G. K. Semin, and T. L. Khotsyanova. 12, 116 (1967) [12, 143 (1967)]

Group-Theoretical Treatment of the Antiferroelectric Phase Transformation in Ammonium Dihydrogen Phosphate. (T) Yu. I. Sirotin. 12, 175 (1967) [12, 208 (1967)]

Mechanism of the Change in Photoconductivity of SbSI Single Crystals in the Region of the Ferroelectric Phase Change. (E) V. N. Nosov. 12, 306 (1967) [12, 359 (1967)]

The Compound $LaCo_{13}$ and Its Crystal Structure. (E) O. S. Zarechnyuk and P. I. Kripyakevich. 12, 438 (1967) [12, 512 (1967)]

Orientational and Habit Relationships between Crystalline Phases in Solid State Transformations. (T) A. L. Roitburd. 12, 499 (1968) [12, 567 (1967)]

Determination of the Interfacial Energy at the Boundary between the Solid and Liquid-Crystal Phases of Para-Azoxyanisole and Cholesteryl Caprinate. (E/T) F. K. Gorskii and N. M. Sakevich. 12, 586 (1968) [12, 674 (1967)]

Phase Transformation in the High-Resistance Semiconductor Sb_2S_3. (E) A. P. Grigas and A. S. Karpus. 12, 627 (1968) [12, 719 (1967)]

Hindered Motion and Phase Transitions in the Propionates. (E/T) I. P. Aleksandrova, L. I. Zherebtsova, and K. S. Aleksandrov. 12, 780 (1968) [12, 894 (1967)]

ELECTRICAL PROPERTIES OF CRYSTALS

Electrical Properties of Linear Dielectrics

Some General Properties of the Nonlinear Polarizability Tensor of Crystals. (T) F. I. Fedorov. 12, 233 (1967) [12, 281 (1967)]

Electrooptical Effect in Triglycine Sulfate Crystals at Room Temperature. (E) I. T. Tukhtasunov, V. A. Shamburov, and I. S. Zheludev. 12, 252 (1967) [12, 302 (1967)]

$KH_3(SeO_3)_2$ Crystal, a New Representative of the Hydroselenite Family. Dielectric Anomalies and Twinned Structure. (E/T) L. A. Shuvalov, N. R. Ivanov, and T. K. Sitnik. 12, 315 (1967) [12, 366 (1967)]

X-Ray and Electrical Studies of the System $Bi_4Ti_3O_{12}$–$BiFeO_3$. (E) I. G. Ismailzade, V. I. Nesterenko, F. A. Mirishli, and P. G. Rustamov. 12, 400 (1967) [12, 468 (1967)]

Dielectric Properties of $SrTiO_3$ Crystals, Pure and Doped with Iron and Chromium. (E) B. N. Matsonashvili. 12, 534 (1968) [12, 612 (1967)]

Structures and Electrical Properties of Ferroelectrics, Piezoelectrics, Pyroelectrics

Calculation of Internal Electric Fields and Their Gradients in Ferrimagnetic $BiFeO_3$. (T) Yu. Ya. Tomashpol'skii and Yu. N. Venevtsev. 12, 18 (1967) [12, 24 (1967)]

Group-Theoretical Treatment of the Antiferroelectric Phase Transformation in Ammonium Dihydrogen Phosphate. (T) Yu. I. Sirotin. 12, 175 (1967) [12, 208 (1967)]

A Precise Polarimetar and Its Application to Study of Changes of the Rotation of the Polarization Plane of Light and the Rotational Electrooptic Effect in Ferroelectrics. (E) N. R. Ivanov, L. A. Shuvalov, A. V. Mirenskii, and G. D. Shnyrev. 12, 256 (1967) [12, 307 (1967)]

Optimum Conditions for Excitation of the Inverse Piezoelectric Effect in Crystals. (T/E) A. E. Karaul'nik, I. S. Zheludev, and M. I. Yaroslavskii. 12, 262 (1967) [12, 314 (1967)]

Mechanism of the Change in Photoconductivity of SbSI Single Crystals in the Region of the Ferroelectric Phase Change. (E) V. N. Nosov. 12, 306 (1967) [12, 359 (1967)]

Thin-Film Piezoelectric Textures. (E/T) S. A. Semiletov and Z. A. Magomedov. 12, 326 (1967) [12, 376 (1967)]

A Preliminary Model of the Benzophenone Structure. (E) E. B. Vul and G. M. Lobanova. 12, 355 (1967) [12, 411 (1967)]

Measurement of the Electromechanical and Electrooptical Coefficients of an ADP Single Crystal Using a Twyman Interferometer. (E) E. V. Sidnenko and I. S. Zheludev. 12, 397 (1967) [12, 465 (1967)]

The Spontaneous Electrooptical Effect in Tetragonal $BaTiO_3$. (E) I. S. Zheludev, E. V. Sidnenko, and S. I. Tepliyakova. 12, 528 (1968) [12, 604 (1967)]

Ferroelectric Response of Tetramethylammonium Triiodomercurate. (E) V. A. Gerken, V. I. Pakhomov, A. S. Sonin, E. I. Marchenko, and V. N. Nepomnyashchaya. 12, 531 (1968) [12, 607 (1967)]

Crystal Structure and Electrical Properties of Indium Antimonide Films Deposited by the Three-Temperature Method. (E) K. V. Shalimova, A. M. Gulyaev, and S. A. Inozemtsev. 12, 569 (1968) [12, 653 (1967)]

Interrelation between the Electrical, Magnetic, and Mechanical Properties of Crystals. (T) V. N. Lyubimov. 12, 612 (1968) [12, 708 (1967)]

Measurement of Some Electrostriction Coefficients for Ammonium Dihydrogen Phosphate. (E) M. P. Zaitseva and A. A. Fotchenkov. 12, 623 (1968) [12, 716 (1967)]

A Method for Finding the Curie Temperature and Measuring the Temperature Dependence of the Dielectric Susceptibility of Ferroelectrics and Antiferroelectrics with High Electrical Conductivity. (E) I. G. Ismailzade and V. I. Nesterenko. 12, 625 (1968) [12, 717 (1967)]

Production of Single Crystal Plates of Indium Antimonide by Crystallization of Droplets of the Melt in the Gap between Quartz Plates. (E) N. M. Demenkov and V. N. Maslov. 12, 650 (1968) [12, 737 (1967)]

Elastic, Piezoelectric, and Pyroelectric Properties of Barium Nitrite Single Crystals. (E) V. V. Gladkii and I. S. Zheludev. 12, 788 (1968) [12, 905 (1967)]

Dislocation and Linear Charge Fields in Piezoelectric Crystals. (T) A. M. Kosevich, L. A. Pastur, and É. P. Fel'dman, 12, 797 (1968) [12, 916 (1967)]

Electron-Microscopic Investigation of the Structure of Tetragonal Barium Titanate. (E) G. L. Pistonov, Yu. Ya. Tomashpol'skii, Yu. N. Venevtsev, and G. S. Zhdanov. 12, 808 (1968) [12, 933 (1967)]

Electrical and Optical Properties of $BaTiO_3$ Crystals Doped with Iron and Cobalt. (E) B. N. Matsonashvili. 12, 867 (1968) [12, 995 (1967)]

Electric Conductivity of Quartz in an Alternating Electric Field. (E) T. M. Glushkova and M. M. Firsova. 12, 871 (1968) [12, 1000 (1967)]

Charged Dislocations in Cesium Iodide. (E/T) R. De Batist, E. von Dingen, Yu. N. Martyshev, I. M. Sil'vestrova, and A. A. Urusovskaya. 12, 881 (1968) [12, 1012 (1967)]

Ternary Compounds in the Zr–H–C and Zr–H–N Systems. (E) R. A. Andrievskii, E. B. Botko, and V. P. Kaitnin. 12, 930 (1968) [12, 1068 (1967)]

Electrical Conductivity of Some Ferroelectric V-VI-VII-Group Semiconductors. (E) T. A. Pikka. 12, 938 (1968) [12, 1075 (1967)]

Dynamic Measurement of the Pyroelectric Effect in TGS Crystals. (E) L. S. Kremenchugskii and V. B. Samoilov. 12, 940 (1968) [12, 1077 (1967)]

MAGNETIC PROPERTIES OF CRYSTALS

Positions of Co^{2+} Ions in the Hexagonal Ferrites of the System $BaCO_X^{2+}Fe_{1-X}^{3+}Fe_{11}^{3+}O_M(Co_XW)$. (E) R. A. Sizov and I. I. Yamzin. 12, 111 (1967) [12, 138 (1967)]

Systematic Extinctions of Reflections in the Coherent Magnetic Scattering of Slow Neutrons, Due to the Presence of Symmetry and Antisymmetry Elements in Collinear Magnetic Materials. (T) R. P. Ozerov. 12, 199 (1967) [12, 239 (1967)]

X-Ray Diffraction Study of the Atomic Structure of Ferromagnetic $BiFeO_3$. (E) Yu. Ya. Tomashpol'skii, Yu. N. Venevtsev, and G. S. Zhdanov. 12, 209 (1967) [12, 252 (1967)]

Cation Distributions in Ferrites with Hexagonal Structures. (E/T) M. A. Vinnik, 12, 344 (1967) [12, 398 (1967)]

Synthesis of Otavite Crystals and Observation of the EPR Spectra of Co^{+2} Ions in Them. (E) A. S. Borovik-Romanov, N. Yu. Ikornikova, V. F. Meshcheryakov, and E. G. Rudashevskii. 12, 417 (1967) [12, 488 (1967)]

Helium Cryostat for a Neutron Diffractometer. (E) V. S. Golovkin, V. N. Bykov, N. V. Khoteev, and V. A. Levdik. 12, 477 (1967) [12, 542 (1967)]

Interrelation between the Electrical, Magnetic, and Mechanical Properties of Crystals. (T) V. N. Lyubimov. 12, 612 (1968) [12, 708 (1967)]

Describing Three-Dimensional Periodic Magnetic Structures by Shubnikov Groups. (T) V. A. Koptsik. 12, 723 (1968) [12, 826 (1967)]

MECHANICAL PROPERTIES OF CRYSTALS

Elasticity of Crystals, Internal Friction

Debye Temperatures for Hexagonal Crystals. (T) T. G. Bystrova and F. I. Fedorov. 12, 9 (1967) [12, 11 (1967)]

Elastic Waves in Crystals of Cubic and Tetragonal Symmetry. (T) Ya. A. Iosilevskii. 12, 57 (1967) [12, 70 (1967)]

Growth of Hexagonal Zinc Sulfide and Investigation of Some of Its Physical Properties. (E) V. G. Zubov, L. A. Sysoev, and M. M. Firsova. 12, 67 (1967) [12, 84 (1967)]

Group-Theoretical Analysis and Basis Vectors of the Long-Wavelength Normal Vibrations of Crystals with the KH_2PO_4 Structure below the Curie Point. (T) M. S. Shur. 12, 181 (1967) [12, 215 (1967)]

Elasticity of Quartz Irradiated with Fast Neutrons. (E) V. G. Zubov and A. T. Ivanov. 12, 313 (1967) [12, 365 (1967)]

Debye Temperatures of Tetragonal and Trigonal Crystals (T/E) T. G. Bystrova and F. I. Fedorov. 12, 493 (1968) [12, 560 (1967)]

Effect of Temperature on Thermal Diffuse Scattering in Polycrystalline Al and Cu. (E) V. I. Iveronova, A. A. Katsnel'son, I. I. Popova, and S. V. Sveshnikov. 12, 775 (1968) [12, 888 (1967)]

Elastic, Piezoelectric, and Pyroelectric Properties of Barium Nitrite Single Crystals. (E) V. V. Gladkii and I. S. Zheludev. 12, 788 (1968) [12, 905 (1967)]

Higher Order Elastic Constants of Cubic Crystals. (T) A. A. Nran'yan. 12, 876 (1968) [12, 1006 (1967)]

The Elastic Constants of Molecular Crystals. III. Temperature Dependence of the Elasticity Tensor of Naphthalene. (E) V. F. Teslenko. 12, 946 (1968) [12, 1082 (1967)]

Microhardness and Dislocation Rosettes

Mechanical Properties of Irradiated Sodium Fluoride Single Crystals Containing a Uranium Impurity. (E) A. A. Alybakov and Y. Shamyrkanov. 12, 635 (1968) [12, 726 (1967)]

Charged Dislocations in Cesium Iodide. (E/T) R. De Batist, E. von Dingen, Yu. N. Martyshev, I. M. Sil'vestrova, and A. A. Urosovskaya. 12, 881 (1968) [12, 1012 (1967)]

Effect of Light Pulses on the Dislocation Structure of Sodium Chloride. (E/T) T. M. Aver'yanova, L. I. Mirkin, and N. F. Pilipetskii. 12, 889 (1968) [12, 1022 (1967)]

Effect of Doping on the Temperature Dependence of the Microhardness and Dislocation Structure of Semiconducting Single Crystals. (E) M. G. Mil'vidskii, V. B. Osvenskii, and O. G. Stolyarov. 12, 896 (1968) [12, 1030 (1967)]

The Microhardness of LiF as a Function of Temperature. (E) G. P Upit, S. A. Varchenya, and L. G. Pavlovskaya. 12, 949 (1968) [12, 1084 (1967)]

Effects of Electron and γ-Ray Bombardment on the Microhardness of Germanium. (E) V. V. Khainovskaya, F. L. Édel'man, and L. S. Smirnov. 12, 950 (1968) [12, 1085 (1967)]

Plastic Deformation

Study of X-Ray Diffraction Images of Some Dislocations Generated in the Plastic Deformation of Germanium. (E) L. I. Datsenko and M. Ya. Skorokhod. 12, 409 (1967) [12, 480 (1967)]

Healing of Cracks in Rock Salt Crystals. (E) Yu. V. Grdina and V. V. Neverov. 12, 421 (1967) [12, 493 (1967)]

Orientational and Habit Relationships between Crystalline Phases in Solid State Transformations. (T) A. L. Roitburd. 12, 499 (1968) [12, 467 (1967)]

Twinning

$KH_3(SeO_3)_2$ Crystal, a New Representative of the Hydroselenite Family. Dielectric Anomalies and Twinned Structure. (E/T) L. A. Shuvalov, N. R. Ivanov, and T. K. Sitnik. 12, 315 (1967) [12, 366 (1967)]

Growth Theory of Crystals Having a Diamond Lattice from the Gaseous Phase by Formation of Two-Dimensional Nuclei. (T) L. A. Borovinskii and R. P. Vorontsova. 12, 505 (1968) [12, 575 (1967)]

Artificial Twinning in Synthetic Quartz Crystals. (E) V. T. Ushakovskii, K. F. Kashkurov, A. V. Simonov, and P. P. Butorin. 12, 954 (1968) [12, 1087 (1967)]

OPTICAL PROPERTIES OF CRYSTALS

Nonlinear Optical Properties of Single Crystals of Deuterated Ammonium Dihydrogen Phosphate. (E) A. S. Vasilevskaya, E. N. Volkova, V. A. Koptsik, L. N. Rashkovich, T. A. Regul'skaya, I. S. Rez, A. S. Sonin, and V. S. Suvorov. 12, 446 (1967) [12, 518 (1967)]

The Spontaneous Electrooptical Effect in Tetragonal $BaTiO_3$. (E) I. S. Zheludev, E. V. Sidnenko, and S. I. Teplyakova. 12, 528 (1968) [12, 604 (1967)]

Characteristics of the Additive Coloring of Alkali Halide Phosphors Activated by Silver Halides. (E) L. M. Shamovskii and L. M. Rodionova. 12, 562 (1968) [12, 646 (1967)]

Optical Properties of Silver Iodide Films. (E) R. N. Kurdyumova and D. T. Sviridov. 12, 643 (1968) [12, 733 (1967)]

Polymorphism of Lead Oxide Single Crystals. (E) G. A. Bordovskii and V. A. Izvozchikov. 12, 818 (1968) [12, 940 (1967)]
Electrical and Optical Properties of $BaTiO_3$ Crystals Doped with Iron and Cobalt. (E) B. N. Matsonashvili. 12, 867 (1968) [12, 995 (1967)]
The Absorption Spectrum of Chrome-Diopside. (E) S. V. Grum-Grzhimailo, O. N. Boksha, and T. M. Varina. 12, 935 (1968) [12, 1073 (1967)]

PRODUCTION OF CRYSTALS

Apparatus for Studying the Growth of Crystals. Grinding, Cutting, and Other Shaping of Crystals

Preparation of GaAs Epitaxial Films by the Sandwich Method. (E) A. V. Kovda and S. A. Semiletov. 12, 468 (1967) [12, 535 (1967)]
Some Anomalies in the Face Growth Rates of $NaClO_3$ and $KClO_3$ as Functions of Temperature at Constant Supersaturation. (E) V. V. Sipyagin. 12, 590 (1968) [12, 678 (1967)]
Growth of Large Corundum Crystals by the Hydrothermal Method. (E) K. F. Kashkurov, P. I. Nikitichev, V. V. Osipov, L. D. Sizova, and A. V. Simonov. 12, 837 (1968) [12, 956 (1967)]
A New High-Pressure Apparatus. (E) A. V. Simonov and V. V. Osipov. 12, 980 (1968) [12, 1109 (1967)]

Crystallization from the Gas Phase

Growth Rate of Crystalline Layers of Gallium Arsenide in the Iodide Process. (E) N. N. Sheftal' and Kh. A. Magomedov. 12, 129 (1967) [12, 152 (1967)]
Movement of Dislocations in Iron Microcrystals. (E) I. P. Kushnir. 12, 405 (1967) [12, 474 (1967)]
Characteristics of the Growth of Silicon Single Crystals from the Gas Phase. (T/E) I. V. Salli, É. S. Fal'kevich, Yu. S. Dement'ev, E. N. Chukal'skii, V. V. Belousova, and V. G. Khrebitshchev. 12, 425 (1967) [12, 499 (1967)]
Growth Theory of Crystals Having a Diamond Lattice from the Gaseous Phase by Formation of Two-Dimensional Nuclei. (T) L. A. Borovinskii and R. P. Vorontsova. 12, 505 (1968) [12, 575 (1967)]
Growth of Strip and Whisker Crystals of Cadmium Sulfide. (E) L. S. Palatnik, M. N. Naboka, and N. T. Gladkikh. 12, 594 (1968) [12, 684 (1967)]
Epitaxy of Cadmium Selenide on CaF_2. (E) L. V. Al'tman, E. N. Vorontsova, Yu. V. Ruban, and G. P. Tikhomirov. 12, 601 (1968) [12, 694 (1967)]
Effect of Annealing on the Properties of the Mosaic Structure of Al and Sn Vacuum Condensates. (E) L. S. Palatnik, M. Ya. Fuks, B. T. Boiko, and P. A. Panchekha. 12, 793 (1968) [12, 911 (1967)]
Effect of a Steady Electric Field on Layer-Spiral Crystal Growth. (E) M. I. Kozlovskii. 12, 968 (1968) [12, 1099 (1967)]

Crystallization from the Melt

Solubility and Conditions of Growth of Corundum from Molten Fluxes. (E) V. A. Timofeeva and N. I. Luk'yanova. 12, 77 (1967) [12, 98 (1967)]
A Relationship between the Thermal Characteristics of the Growth Process of Crystals from a Melt. (T) S. V. Tsivinskii 12, 119 (1967) [12, 145 (1967)]
Distribution of KOH and KNO_3 Impurities in the Crystallization of KBr from the Melt and Their Effect on Crystal Density. (E) G. A. Andreev. 12, 121 (1967) [12, 146 (1967)]
Crystalline Structures of Some Compounds in the Nb–Ni and Ta–Ni Systems. (E) P. I. Kripyakevich and E. N. Pylaeva. 12, 294 (1967) [12, 350 (1967)]
Effect of Indium Impurity on the Crystallization Process of Selenium. (E) V. N. Lange, T. I. Lange, and V. A. Titov. 12, 456 (1967) [12, 525 (1967)]
Growth Mechanism of α-Modification Centers in High-Purity Tin. (E/T) A. I. Bykhovskii, L. N. Larikov, and V. M. Fal'chenko. 12, 460 (1967) [12, 528 (1967)]
Heteroepitaxy of Molybdenum on Tungsten from the Liquid State. (E) Yu. D. Chistyakov, A. I. Pekarev, and M. V. Gartman. 12, 597 (1968) [12, 688 (1967)]
Production of Single Crystal Plates of Indium Antimonide by Crystallization of Droplets of the Melt in the Gap between Quartz Plates. (E) N. M. Demenkov and V. N. Maslov. 12, 650 (1968) [12, 737 (1967)]
Characteristics of the Additive Coloring of Alkali Halide Phosphors Activated by Silver Halides. (E) L. M. Shamovskii and L. M. Rodionova. 12, 562 (1968) [12, 646 (1967)]
Phase Diagram of the Biphenyl–α,α'-Dipyridyl System. (E) S. A. Remyga, R. M. Myasnikova, and A. I. Kitaigorodskii. 12, 784 (1968) [12, 900 (1967)]

Crystallization from the Solution

Nucleus Formation in the Crystallization of Two-Component Liquids. (T) D. S. Kamenetskaya. 12, 71 (1967) [12, 90 (1967)]
Solubility and Conditions of Growth of Corundum from Molten Fluxes. (E) V. A. Timofeeva and N. I. Luk'yanova. 12, 77 (1967) [12, 98 (1967)]
Distribution of Impurities in the Crystallization of NaCl, KCl, and KBr from Aqueous Solutions (E/T) G. A. Andreev. 12, 82 (1967) [12, 104 (1967)]
Hydrothermal Synthesis of Aluminum and Gallium Garnets. (E) B. V. Mill'. 12, 137 (1967) [12, 158 (1967)]
Coarsening of the Grains of Powdered Rochelle Salt in Its Own Solution Due to Temperature Fluctuations. (E) N. V. Gordeeva and A. V. Shubnikov. 12, 154 (1967) [12, 186 (1967)]
Experimental Investigation of the Rotation of the Plane of Polarization of Light in Dithionate Crystals. (E/T) L. M. Belyaev and Z. B. Perekalina. 12, 243 (1967) [12, 291 (1967)]
Crystallization of Ruby under Hydrothermal Conditions. (E) V. A. Kuznetsov and A. A. Shternberg. 12, 280 (1967) [12, 336 (1967)]
Growing of Crystals from Aqueous Solutions at Constant Temperature and Supersaturation. (E) V. F. Parvov. 12, 324 (1967) [12, 374 (1967)]
Growth of Large Hematite Crystals from Solution in a Bi_2O_3–Na_2CO_3 (Flux) Melt. (E) R. A. Voskanyan and I. S. Zheludev. 12, 473 (1967) [12, 539 (1967)]
Some Anomalies in the Face Growth Rates of $NaClO_3$ and $KClO_3$ as Functions of Temperature at Constant Supersaturation. (E) V. V. Sipyagin. 12, 590 (1968) [12, 678 (1967)]
The Crystal Structure of Catalase. (E) B. K. Vainshtein, V. V. Barynin, G. V. Gurskaya, and V. Ya. Nikitin. 12, 750 (1968) [12, 860 (1967)]
Some Peculiarities of the Growth of Potassium Dihydrogen Phosphate Single Crystals under Steady-State Conditions. (E) I. G. Yavorovskii. 12, 973 (1968) [12, 1104 (1967)]

Etching of Crystals

Etching Germanium with Iodine Vapor in an Electric Field. (E) G. A. Kurov and B. S. Kurbatov. 12, 135 (1967) [12, 149 (1967)]
Etch Polishing of Germanium by Means of Gaseous Hydrogen Sulfide. (E) L. L. Vasil'eva and S. V. Pokrovskaya. 12, 127 (1967) [12, 150 (1967)]
Growth of Epitaxial Germanium Films by the Sandwich Method. (E) B. S. Kurbatov, E. V. Rakova, and G. A. Kurov. 12, 140 (1967) [12, 160 (1967)]
Influence of Preparatory Surface Treatment of Gallium Arsenide Substrates on the Perfection of Autoepitaxial Layers Growing on Them. (E) Kh. A. Magomedov and N. N. Magomedov. 12, 286 (1967) [12, 343 (1967)]
Selective Etching on Dislocations in Crystals of Potassium Tartrate Hemihydrate. (E) V. A. Meleshina. 12, 322 (1967) [12, 371 (1967)]
Method for the Selective Etching of Ammonium Dihydrogen Phosphate Crystals. (E) V. A. Meleshina, T. F. Chernysheva, and N. B. Russova. 12, 454 (1967) [12, 523 (1967)]
Growth Figures and Dislocations in Rock-Salt Single-Crystal Layers. (E) V. M. Kosevich, V. M. Moskalev, and L. S. Palatnik. 12, 581 (1968) [12, 667 (1967)]

Point Pit Etching in Quartz. (E) E. V. Tsinzerling. 12, 637 (1968) [12, 727 (1967)]
Selective Etching of Indium Antimonide Single Crystals in a Hydrochloric Acid Solution of Ferric Chloride. (E) V. N. Vertoprakhov and V. P. Zinov'eva. 12, 822 (1968) [12, 944 (1967)]
Reflection Coefficient of Iodine Vapor from Single-Crystal Germanium. (E) I. G. Khar'yuzov and G. A. Kurov. 12, 825 (1968) [12, 947 (1967)]
Effect of Light Pulses on the Dislocation Structure of Sodium Chloride. (E/T) T. M. Aver'yanova, L. I. Mirkin, and N. F. Pilipetskii. 12, 889 (1968) [12, 1022 (1967)]

External Morphology

The Garnet Pattern in the Structure of Iron Molybdate. (T/E) L. M. Plyasova, S. V. Borisov, and N. V. Belov. 12, 25 (1967) [12, 33 (1967)]
Solubility and Conditions of Growth of Corundum from Molten Fluxes. (E) V. A. Timofeeva and N. I. Luk'yanova. 12, 77 (1967) [12, 98 (1967)]
Determination of Patterns of Macromosaic Substructure in Metal Single Crystals by X-Ray Diffraction Microscopy. (E) V. O. Esin and T. V. Ushkova. 12, 108 (1967) [12, 136 (1967)]
Influence of Some Crystal Defects on the Morphology of Its Growing Surface. I. Growth of a Mosaic Block Crystal on a Substrate. (E/T) E. D. Dukova. 12, 271 (1967) [12, 325 (1967)]
Influence of Some Crystal Defects on the Morphology of Its Growing Surface. II. Formation of Defects in the Growing over of Inclusions, and the Part Played by Block Boundaries at High Supersaturation. (E/T) E. D. Dukova. 12, 413 (1967) [12, 483 (1967)]
X-Ray Study of the Sodium-Iron Metagermanate $NaFeGe_2O_6$. (E) L. P. Solov'eva and V. V. Bakakin. 12, 517 (1968) [12, 591 (1967)]
Application of the Selective Etch Method in the Study of Structural Defects in Synthetic Quartz. (E) M. S. Joshi and A. S. Vag. 12, 573 (1968) [12, 656 (1967)]

Growing of Crystals

Growth of Hexagonal Zinc Sulfide and Investigation of Some of Its Physical Properties. (E) V. G. Zubov, L. A. Sysoev, and M. M. Firsova. 12, 67 (1967) [12, 84 (1967)]
The Growing of Potassium Dichromate Crystals in the Form of a Growth Pyramid of One (001) Face. (E) V. F. Parvov. 12, 465 (1967) [12, 532 (1967)]
The Growing of Magnesium Single Crystals. (E) V. F. Zelenskii and I. A. Petel'guzov. 12, 466 (1967) [12, 533 (1967)]
Some Anomalies in the Face Growth Rates of $NaClO_3$ and $KClO_3$ as Functions of Temperature at Constant Supersaturation. (E) V. V. Sipyagin. 12, 590 (1968) [12, 678 (1967)]
Growth of Strip and Whisker Crystals of Cadmium Sulfide. (E) L. S. Palatnik, M. N. Naboka, and N. T. Gladkikh. 12, 594 (1968) [12, 684 (1967)]
Heteroepitaxy of Molybdenum on Tungsten from the Liquid State. (E) Yu. D. Chistyakov, A. I. Pekarev, and M. V. Gartman. 12, 597 (1968) [12, 688 (1967)]
Epitaxy of Cadmium Selenide on CaF_2. (E) L. V. Al'tman, E. N. Vorontsova, Yu. V. Ruban, and G. P. Tikhomirov. 12, 601 (1968) [12, 694 (1967)]
Kinetics of Hydrothermal Crystallization of Corundum. II. Effect of Solvents on Crystallization. (E) V. A. Kuznetsov. 12, 608 (1968) [12, 702 (1967)]
Epitaxy of Ice on Sodium Bromate Crystals. (E) T. G. Petrov and A. P. Kasatkin. 12, 647 (1968) [12, 735 (1967)]
Theory of a Method of Experimentally Determining the Growth Rate of Metallic Crystals as a Function of Supercooling. (T/E) V. S. Gerasimenko and B. Ya. Lyubov. 12, 734 (1968) [12, 840 (1967)]
Crystallographic Study of the Iodohydrate of Gramicidine C. (E) G. N. Tishchenko, K. A. Zykalova, and A. I. Grebenko. 12, 758 (1968) [12, 868 (1967)]
Growth of Large Corundum Crystals by the Hydrothermal Method. (E) K. F. Kashkurov, P. I. Nikitichev, V. V. Osipov, L. D. Sizova, and A. V. Simonov. 12, 837 (1968) [12, 956 (1967)]
Hydrothermal Synthesis of Potassium Niobate and Potassium Tantalate. (E) A. A. Shternberg, Ya. É. Lapsker, and V. A. Kuznetsov. 12, 838 (1968) [12, 957 (1967)]
Growth of Acetoxime Single Crystals. (E) A. P. Kasatkin. 12, 840 (1968) [12, 959 (1967)]
Single-Crystal Layers of Germanium and Silicon, Prepared by Pyrolysis of Hydrides. (E) T. A. Zeveke, L. N. Kornev, and V. A. Tolomasov. 12, 919 (1968) [12, 1058 (1967)]
Causes of the Predominance of Left-Handed Forms of Epsomite. (E) É. D. Rogacheva. 12, 961 (1968) [12, 1093 (1967)]
Hydrothermal Synthesis of Some Double Lithium-Rare Earth Tungstate Crystals. (E) L. Yu. Kharchenko and P. V. Klevtsov. 12, 965 (1968) [12, 1097 (1967)]
Effect of X-Rays on the Growth of $CuSO_4$ Crystals from Aqueous Solution. (E) Ya. S. Abdullaeva and G. A. Gumanskii. 12, 967 (1968) [12, 1099 (1967)]

Impurities (Trapping of Impurities, and Their Influence on Growth Kinetics)

Profile of a Kinematic Shock Wave on a Crystal Surface. (T) V. V. Voronkov. 12, 15 (1967) [12, 19 (1967)]
Distribution of Impurities in the Crystallization of NaCl, KCl, and KBr from Aqueous Solutions. (E/T) G. A. Andreev. 12, 82 (1967) [12, 104 (1967)]
Distribution of KOH and KNO_3 Impurities in the Crystallization of KBr from the Melt and Their Effect on Crystal Density. (E) G. A. Andreev. 12, 121 (1967) [12, 146 (1967)]
Entrapment of an Impurity During the Movement of an Elementary Step. (T) V. V. Voronkov and A. A. Chernov. 12, 186 (1967) [12, 222 (1967)]
Crystallization of Ruby under Hydrothermal Conditions. (E) V. A. Kuznetsov and A. A. Shternberg. 12, 280 (1967) [12, 336 (1967)]
Decoration of Quartz by a Precipitate Resulting from Chemical Reaction. (E/T) E. V. Tsinzerling. 12, 319 (1967) [12, 370 (1967)]
Effect of Indium Impurity on the Crystallization Process of Selenium. (E) V. N. Lange, T. I. Lange, and V. A. Titov. 12, 456 (1967) [12, 525 (1967)]
Effect of Aluminum Ions on the Growth Rate of Potassium Dihydrogen Phosphate Crystal Faces. (E) V. N. Portnov. 12, 463 (1967) [12, 530 (1967)]
Characteristics of the Additive Coloring of Alkali Halide Phosphors Activated by Silver Halides. (E) L. M. Shamovskii and L. M. Rodionova. 12, 562 (1968) [12, 646 (1967)]

SCIENTIFIC NEWS ITEMS

Nuclear Magnetic Resonance Study of Ruby Single Crystals. (E) V. S. Pavlovskaya, V. F. Belov, M. D. Kapustina, A. N. Asabin, and V. Ya. Khaimov-Mal'kov. 12, 41 (1967) [12, 51 (1967)]
Spectral Investigations of Thermoluminescence in Quartz Containing Additions of Aluminum and Germanium by Fourier Spectrometry. (E) I. P. Petrov. 12, 117 (1967) [12, 144 (1967)]
Aleksei Vasil'evich Shubnikov. 12, 147 (1967) [12, 179 (1967)]
The Eightieth Birthday of A. V. Shubnikov. 12, 149 (1967) [12, 180 (1967)]
70th Anniversary of Academician George Nadzhakov. 12, 332 (1967) [12, 382 (1967)]
A. L. Patterson (1902–1966). 12, 333 (1967) [12, 383 (1967)]
Ilarion Ilarionovich Shafranovskii (on His Sixtieth Birthday). 12, 335 (1967) [12, 387 (1967)]
Problems of Crystallography (Results of the VII International Congress of Crystallographers). (R) V. I. Simonov. 12, 479 (1967) [12, 544 (1967)]
First All-Union Conference on Internal Friction in Nonmetallic Inorganic Materials. (R) N. A. Tyapunina, M. P. Shaskol'skaya, and L. A. Shuvalov. 12, 657 (1968) [12, 743 (1967)]
At the Fifty-Year Mark. (R) B. K. Vainshtein. 12, 661 (1968) [12, 747 (1967)]
Ekaterina Vladimirovna Tsinzerling (On Her Eightieth Birthday). 12, 843 (1968) [12, 963 (1967)]

STRUCTURES OF REAL CRYSTALS

Imperfections, Special Diffraction Methods for: Degree of Dispersion, Distortion, Mozaicity, Concentration Inhomogeneity, etc. (See also: Theory of Scattering)

Nuclear Magnetic Resonance Study of Ruby Single Crystals. (E) V. S. Pavlovskaya, V. F. Belov, M. D. Kapustina, A. N. Asabin, and V. Ya. Khaimov-Mal'kov. 12, 41 (1967) [12, 51 (1967)]

Concentration and Type of Point Defects in Gallium Arsenide. (E/T) S. A. Semiletov. 12, 277 (1967) [12, 333 (1967)]

Effect of Annealing on the Properties of the Mosaic Structure of Al and Sn Vacuum Condensates. (E) L. S. Palatnik, M. Ya. Fuks, B. T. Boiko, and P. A. Panchekha. 12, 793 (1968) [12, 911 (1967)]

Structure Defects in Metal Single Crystals Grown from Melts. (E) A. A. Kralina. 12, 834 (1968) [12, 954 (1967)]

Studies of Dislocations and the Dislocation Structures of Crystals

Influence of Block Structure and Slip Planes on the Divergence of the Laser Radiation of Ruby Crystals. (E/T) E. M. Akulenok, Kh. S. Bagdasarov, V. S. Papkov, and V. Ya. Khaimov-Mal'kov. 12, 237 (1967) [12, 286 (1967)]

Dislocation Structure of Decorated NaCl Crystals. (E) A. A. Predvoditelev, V. N. Rozhanskii, and E. V. Darinskaya. 12, 265 (1967) [12, 319 (1967)]

Influence of Some Crystal Defects on the Morphology of Its Growing Surface. I. Growth of a Mosaic Block Crystal on a Substrate. (E/T) E. D. Dukova. 12, 271 (1967) [12, 325 (1967)]

Influence of Preparatory Surface Treatment of Gallium Arsenide Substrates on the Perfection of Autoepitaxial Layers Growing on Them. (E) Kh. A. Magomedov and N. N. Magomedov. 12, 286 (1967) [12, 343 (1967)]

Movement of Dislocations in Iron Microcrystals. (E) I. P. Kushnir. 12, 405 (1967) [12, 474 (1967)]

Influence of Some Crystal Defects on the Morphology of Its Growing Surface. II. Formation of Defects in the Growing over of Inclusions, and the Part Played by Block Boundaries at High Supersaturation. (E/T) E. D. Dukova. 12, 413 (1967) [12, 483 (1967)]

Interaction of Dislocations with Block Boundaries in NaCl Crystals. (E) L. I. Mirkin and T. M. Aver'yanova. 12, 450 (1967) [12, 521 (1967)]

Regarding the Determination of Block Size from Extinction Effects. (E) G. M. Vorob'ev and L. I. Kotova. 12, 548 (1968) [12, 631 (1967)]

Application of the Selective Etch Method in the Study of Structural Defects in Synthetic Quartz. (E) M. S. Joshi and A. S. Vag. 12, 573 (1968) [12, 656 (1967)]

Growth Figures and Dislocations in Rock-Salt Single-Crystal Layers. (E) V. M. Kosevich, V. M. Moskalev, and L. S. Palatnik. 12, 581 (1968) [12, 667 (1967)]

Dislocation and Linear Charge Fields in Piezoelectric Crystals. (T) A. M. Kosevich, L. A. Pastur, and É. P. Fel'dman. 12, 797 (1968) [12, 916 (1967)]

Structure of Dislocation Kinks and Steps in the Germanium Lattice. (E) A. N. Orlov and E. M. Zonshain. 12, 831 (1968) [12, 951 (1967)]

Use of Unsymmetrical Photographs to Investigate Dislocations in Germanium by the Borrmann Method. (E) L. V. Tikhonov and G. V. Khar'kova. 12, 951 (1968) [12, 1086 (1967)]

Surface Structure of Negative Crystals (Pores) in Molybdenum. (E) G. A. Klein and V. A. Krakhmalev. 12, 964 (1968) [12, 1096 (1967)]

THEORETICAL CRYSTALLOGRAPHY

Antisymmetry

Classification Principles for the Symmetry and Antisymmetry Groups. II. Special Spatial Elements as the Basis of Classification for Symmetry Groups. (T) N. N. Neronova. 12, 3 (1967) [12, 3 (1967)]

Classification Principles for Symmetry Groups and Groups of Different Kinds of Antisymmetry. III. Brief Survey of "Crystallographic" Symmetry Groups of Three-Dimensional Continua, Discontinua, Semicontinua, and Aperiodic Objects. (T) N. N. Neronova. 12, 159 (1967) [12, 191 (1967)]

Groups of Colored Symmetry and of Different Kinds of Antisymmetry of Layers. (T) A. F. Palistrant. 12, 162 (1967) [12, 194 (1967)]

The Simplest Laminar Silicates in Terms of Shubnikov (Anti) Symmetry Groups. (T) N. V. Belov and Yu. A. Kharitonov. 12, 196 (1967) [12, 235 (1967)]

Systematic Extinctions of Reflections in the Coherent Magnetic Scattering of Slow Neutrons, Due to the Presence of Symmetry and Antisymmetry Elements in Collinear Magnetic Materials. (T) R. P. Ozerov. 12, 199 (1967) [12, 239 (1967)]

Derivation of Symmetry and Antisymmetry Groups. (T) V. N. Lyubimov. 12, 290 (1967) [12, 348 (1967)]

Quasisymmetry (P-Symmetry) Groups. (T) A. M. Zamorzaev. 12, 717 (1968) [12, 819 (1967)]

Describing Three Dimensional Periodic Magnetic Structures by Shubnikov Groups. (T) V. A. Koptsik. 12, 723 (1968) [12, 826 (1967)]

Other Generalizations of Symmetry (Except Antisymmetry)

Conical Groups of Similarity Symmetry and of Antisymmetry of a Different Kind. (T) É. I. Galyarskii. 12, 169 (1967) [12, 202 (1967)]

Calculation of Complex Distributions and Weighted Projections of the Electron Density. (T) V. I. Burdina. 12, 192 (1967) [12, 230 (1967)]

The Simplest Laminar Silicates in Terms of Shubnikov (Anti) Symmetry Groups. (T) N. V. Belov and Yu. A. Kharitonov. 12, 196 (1967) [12, 235 (1967)]

Systematic Extinctions of Reflections in the Coherent Magnetic Scattering of Slow Neutrons, Due to the Presence of Symmetry and Antisymmetry Elements in Collinear Magnetic Materials. (T) R. P. Ozerov. 12, 199 (1967) [12, 239 (1967)]

X-Ray Diffraction Study of the Atomic Structure of Stillwellite $CeBO[SiO_4]$. (E) A. A. Voronkov and Yu. A. Pyatenko. 12, 214 (1967) [12, 258 (1967)]

Quasisymmetry (P-Symmetry) Groups. (T) A. M. Zamorzaev. 12, 717 (1968) [12, 819 (1967)]

Symmetry

Classification Principles for the Symmetry and Antisymmetry Groups. II. Special Spatial Elements as the Basis of Classification for Symmetry Groups. (T) N. N. Neronova. 12, 3 (1967) [12, 3 (1967)]

Symmetries of Higher Order Multipoles. (T) V. N. Lyubimov. 12, 102 (1967) [12, 130 (1967)]

Classification Principles for Symmetry Groups of Different Kinds of Antisymmetry. III. Brief Survey of "Crystallographic" Symmetry Groups of Three-Dimensional Continua, Discontinua, Semicontinua, and Aperiodic Objects. (T) N. N. Neronova. 12, 159 (1967) [12, 191 (1967)]

Groups of Colored Symmetry and of Different Kinds of Antisymmetry of Layers. (T) A. F. Palistrant. 12, 162 (1967) [12, 194 (1967)]

Conical Groups of Similarity Symmetry and of Antisymmetry of a Different Kind. (T) É. I. Galyarskii. 12, 169 (1967) [12, 202 (1967)]

Group-Theoretical Treatment of the Antiferroelectric Phase Transformation in Ammonium Dihydrogen Phosphate. (T) Yu. I. Sirotin. 12, 175 (1967) [12, 208 (1967)]

Systematic Extinctions of Reflections in the Coherent Magnetic Scattering of Slow Neutrons, Due to the Presence of Symmetry and Antisymmetry Elements in Collinear Magnetic Materials. (T) R. P. Ozerov. 12, 199 (1967) [12, 239 (1967)]

X-Ray Diffraction Study of the Atomic Structure of Stillwellite $CeBO[SiO_4]$. (E) A. A. Voronkov and Yu. A. Pyatenko. 12, 214 (1967) [12, 258 (1967)]

Some General Properties of the Nonlinear Polarizability Tensor of Crystals. (T) F. I. Fedorov. 12, 233 (1967) [12, 281 (1967)]
Derivation of Symmetry and Antisymmetry Groups. (T) V. N. Lyubimov. 12, 290 (1967) [12, 348 (1967)]
A General Sketch of the Development of the Theory of Symmetry and Its Applications in Physical Crystallography over the Last 50 Years. (R) V. A. Koptsik. 12, 667 (1968) [12, 755 (1967)]
Solution of Three-Dimensional Field Anisotropy Problems Using Rectilinear Generators. (T) V. L. Indenbom and S. S. Orlov. 12, 849 (1968) [12, 971 (1967)]
Projection Operators for the Irreducible Representations of Space Groups. (T) M. S. Shur. 12, 857 (1968) [12, 981 (1967)]

Theory of Crystal Growth, Theory of Dislocations

Profile of a Kinematic Shock Wave on a Crystal Surface. (T) V. V. Voronkov. 12, 15 (1967) [12, 19 (1967)]
Nucleus Formation in the Crystallization of Two-Component Liquids. (T) D. S. Kamenetskaya. 12, 71 (1967) [12, 90 (1967)]
Entrapment of an Impurity during the Movement of an Elementary Step. (T) V. V. Voronkov and A. A. Chernov. 12, 186 (1967) [12, 222 (1967)]
Characteristics of the Growth of Silicon Single Crystals from the Gas Phase. (T/E) I. V. Salli, É. S. Fal'kevich, Yu. S. Dement'ev, E. N. Chukal'skii, V. V. Belousova, and V. G. Khrebtishchev. 12, 425 (1967) [12, 499 (1967)]
Growth Theory of Crystals Having a Diamond Lattice from the Gaseous Phase by Formation of Two-Dimensional Nuclei. (T) L. A. Borovinskii and R. P. Vorontsova. 12, 505 (1968) [12, 575 (1967)]

Theory of Crystal Structure Determination

Polytypism in Molybdenite. (T) B. B. Zvyagin and S. V. Soboleva. 12, 46 (1967) [12, 57 (1967)]
Convergence Problems in Crystal Structure Refinement by the Least Squares Method. (E/T) R. A. Brusentsev. 12, 337 (1967) [12, 389 (1967)]
Cation Distributions in Ferrites with Hexagonal Structures. (E/T) M. A. Vinnik. 12, 344 (1967) [12, 398 (1967)]
X-Ray Diffraction Method of Determining Substructure. (T/E) B. Ya. Pines, E. E. Badiyan, A. F. Sirenko, and D. D. Solnyshkin. 12, 365 (1967) [12, 423 (1967)]
Diffraction by a Linear System of Particles with an Arbitrary Form Factor. (T) D. Ya. Tsvankin. 12, 489 (1968) [12, 555 (1967)]
Some Problems in the Geometry of Diffraction Patterns from Slow Electrons. (T/E) V. F. Dvoryankin and A. Yu. Mityagin. 12, 845 (1968) [12, 966 (1967)]
The Structure of Molecular Crystals. II. A Complete Calculation of the Close-Packed Arrays of Planar Molecules in Layers. (T/E) P. M. Zorkii and M. A. Porai-Koshits. 12, 863 (1968) [12, 989 (1967)]
Diffraction of Slow Electrons: A Method of Studying the Atomic Structure of Surfaces. V. F. Dvoryankin and A. Yu. Mityagin. 12, 892 (1968) [12, 1112 (1967)]

Theory of the Scattering of X Rays, Electrons, and Neutrons

The Absolute Intensity of Small Angle X-Ray Scattering in Apparatus Employing Slit Collimation, and the Calculation of the Molecular Weights of Macromolecules. (E/T) L. A. Feigin. 12, 228 (1967) [12, 274 (1967)]
X-Ray Diffraction Method of Determining Substructure. (T/E) B. Ya. Pines, E. E. Badiyan, A. F. Sirenko, and D. D. Solnyshkin. 12, 365 (1967) [12, 423 (1967)]
Atomic Scattering Factors for X-Rays and Effective Charges of Atoms in Semiconductors of Type $A^{III}B^{V}$. (T) R. I. Anishchenko and A. N. Gusatinskii. 12, 440 (1967) [12, 514 (1967)]
Diffraction by a Linear System of Particles with an Arbitrary Form Factor. (T) D. Ya. Tsvankin. 12, 489 (1968) [12, 555 (1967)]
A Criterion for the Applicability of the Born Approximation to Electron-Diffraction Structural Studies. (T) V. F. Dvoryankin, A. Yu. Mityagin, and S. A. Akhundov. 12, 509 (1968) [12, 579 (1967)]
Calculating Extinction Effects. (T) A. V. Kuznetsov and O. M. Kozlov. 12, 540 (1968) [12, 620 (1967)]
Extinction Effects in Aluminum Single Crystals. (E) O. M. Kozlov and A. V. Kuznetsov. 12, 544 (1968) [12, 626 (1967)]
Estimate of Resolving Power and Choice of Optimum Exposure Conditions in the Determination of the Substructure Characteristics of Polycrystals from the Widths of Their X-Ray Reflections. (T) D. N. Shivrin. 12, 629 (1968) [12, 721 (1967)]
Light Modulations in a Circularly Polarizing Modulating Field. (T) V. I. Zharikov. 12, 655 (1968) [12, 741 (1967)]
Graphical Method of Plotting Regions of Diffuse Scattering. (T) G. V. Kleshchev and A. I. Sheinkman. 12, 903 (1968) [12, 1039 (1967)]
Diffraction of Slow Electrons: A Method of Studying the Atomic Structure of Surfaces. (R) V. F. Dvoryankin and A. Yu. Mityagin. 12, 982 (1968) [12, 1112 (1967)]

Theory of the Solid State

Elastic Waves in Crystals of Cubic and Tetragonal Symmetry. (T) Ya. A. Iosilevskii. 12, 57 (1967) [12, 70 (1967)]
Symmetries of Higher-Order Multipoles. (T) V. N. Lyubimov. 12, 102 (1967) [12, 130 (1967)]
Calculation of Complex Distributions and Weighted Projections of the Electron Density. (T) V. I. Burdina. 12, 192 (1967) [12, 230 (1967)]
Influence of Block Structure and Slip Planes on the Divergence of the Laser Radiation of Ruby Crystals. (E/T) E. M. Akulenok, Kh. S. Bagdasarov, V. S. Papkov, and V. Ya. Khaimov-Mal'kov. 12, 237 (1967) [12, 286 (1967)]
Optimum Conditions for Excitation of the Inverse Piezoelectric Effect in Crystals. (T/E) A. E. Karaul'nik, I. S. Zheludev, and M. I. Yaroslavskii. 12, 262 (1967) [12, 314 (1967)]
Dislocation Structure of Decorated NaCl Crystals. (E) A. A. Predvoditelev, V. N. Rozhanskii, and E. V. Darinskaya. 12, 265 (1967) [12, 319 (1967)]
Temperature Dependence of the Generalized Grüneisen Tensor for an Organic Crystal. (T/E) A. I. Kitaigorodskii, B. D. Koreshkov, and V. F. Teslenko. 12, 292 (1967) [12, 349 (1967)]
Thermodynamic Interpretation of Nonequilibrium Forms of Crystals. (T) E. B. Treivus. 12, 432 (1967) [12, 508 (1967)]
On the Theory of Crystallization. (T) D. L. Leitschkis. 12, 459 (1967) [12, 527 (1967)]
Debye Temperatures of Tetragonal and Trigonal Crystals. (T/E) T. G. Bystrova and F. I. Fedorov. 12, 493 (1968) [12, 560 (1967)]
Orientational and Habit Relationships between Crystalline Phases in Solid State Transformations. (T) A. L. Roitburd. 12, 499 (1968) [12, 567 (1967)]
Growth Theory of Crystals Having a Diamond Lattice from the Gaseous Phase by Formation of Two-Dimensional Nuclei. (T) L. A. Borovinskii and R. P. Vorontsova. 12, 505 (1968) [12, 575 (1967)]
A Criterion for the Applicability of the Born Approximation to Electron-Diffraction Structural Studies. (T) V. F. Dvoryankin, A. Yu. Mityagin, and S. A. Akhundov. 12, 509 (1968) [12, 579 (1967)]
Determination of the Coherent Intensity and Background Intensity from the Observed Electron-Scattering Curve. (T/E) I. D. Nabitovich, Ya. I. Stetsiv, and Ya. V. Voloshchuk. 12, 513 (1968) [12, 584 (1967)]
Interrelation between the Electrical, Magnetic, and Mechanical Properties of Crystals. (T) V. N. Lyubimov. 12, 612 (1968) [12, 708 (1967)]
A General Sketch of the Development of the Theory of Symmetry and Its Applications in Physical Crystallography over the Last 50 Years. (R) V. A. Koptsik. 12, 667 (1968) [12, 755 (1967)]

Angular Dependence of the Surface Free Energy of a Crystal. (T) V. V. Voronkov. 12, 728 (1968) [12, 831 (1967)]
Dislocation and Linear Charge Fields in Piezoelectric Crystals. (T) A. M. Kosevich, L. A. Pastur, and É. P. Fel'dman. 12, 797 (1968) [12, 916 (1967)]
Solution of Three-Dimensional Field Anisotropy Problems Using Rectilinear Generators. (T) V. L. Indenbom and S. S. Oriov. 12, 849 (1968) [12, 971 (1967)]
Projection Operators for the Irreducible Representations of Space Groups. (T) M. S. Shur. 12, 857 (1968) [12, 981 (1967)]

Thermal and Thermodynamic Properties

Debye Temperatures for Hexagonal Crystals. (T) T. G. Bystrova and F. I. Fedorov. 12, 9 (1967) [12, 11 (1967)]
Study of the Phase Transformation and Structure of α-GeTe. (E) T. B. Zhukova and A. I. Zaslavskii. 12, 28 (1967) [12, 37 (1967)]
Anomalous Pleochroism in Synthetic Smoky Quartz Crystals. (E/T) L. I. Tsinober, M. I. Samoilovich, L. A. Gordienko, and L. G. Chentsova. 12, 53 (1967) [12, 65 (1967)]
Some Aspects of the Growth of Epitaxial Germanium Films by the Sandwich Method. (E/T) I. D. Voronova and G. V. Chaplygin. 12, 99 (1967) [12, 125 (1967)]
A Relationship between the Thermal Characteristics of the Growth Process of Crystals from a Melt. (T) S. V. Tsivinskii. 12, 119 (1967) [12, 145 (1967)]
Hydrothermal Synthesis of Aluminum and Gallium Garnets. (E) B. V. Mill'. 12, 137 (1967) [12, 158 (1967)]
Coarsening of the Grains of Powdered Rochelle Salt in Its Own Solution Due to Temperature Fluctuations. (E) N. V. Gordeeva and A. V. Shubnikov. 12, 154 (1967) [12, 186 (1967)]
Entrapment of an Impurity during the Movement of an Elementary Step. (T) V. V. Voronkov and A. A. Chernov. 12, 186 (1967) [12, 222 (1967)]
Electrooptical Properties of Triglycine Sulfate. III. (E) A. S. Vasilevskaya and A. S. Sonin. 12, 248 (1967) [12, 297 (1967)]
Temperature and Wavelength Dependences of the Electrooptical Coefficient r_{63} in ADP Crystals. (E) O. G. Blokh and L. F. Lutsiv-Shumskii. 12, 380 (1967) [12, 443 (1967)]
Electrooptical Properties of Rochelle Salt. (E) A. T. Anistratov and K. S. Aleksandrov. 12, 392 (1967) [12, 459 (1967)]
Thermodynamic Interpretation of Nonequilibrium Forms of Crystals. (T) E. B. Treivus. 12, 432 (1967) [12, 508 (1967)]
Effect of Temperature on the Scattering of Light by Liquid Crystals of the Cholesterol Type. (E) A. P. Kapustin. 12, 443 (1967) [12, 516 (1967)]
Anisotropy of Thermoelectric Properties in Chromium Disilicide and in Single Crystals of the Highest Silicide of Manganese (E) B. K. Voronov, L. D. Dudkin, and N. N. Trusova. 12, 448 1967) [12, 519 (1967)]
On the Theory of Crystallization. (T) D. L. Leitschkis. 12, 459 (1967) [12, 527 (1967)]
Determination of the Interfacial Energy at the Boundary between the Solid and Liquid-Crystal Phases of Para-Azoxyanisole and Cholesteryl Caprinate. (E/T) F. K. Gorskii and N. M. Sakevich. 12, 586 (1968) [12, 674 (1967)]
Crystallization Mechanism of Selenium. (E/T) K. P. Mamedov and Z. D. Nurieva. 12, 605 (1968) [12, 698 (1967)]
Kinetics of Hydrothermal Crystallization of Corundum. II. Effect of Solvents on Crystallization. (E) V. A. Kuznetsov. 12 608 (1968) [12, 702 (1967)]
A Method for Finding the Curie Temperature and Measuring the Temperature Dependence of the Dielectric Susceptibility of Ferroelectrics and Antiferroelectrics with High Electrical Conductivity. (E) I. G. Ismailzade and V. I. Nesterenko. 12, 625 (1968) [12, 717 (1967)]
Angular Dependence of the Surface Free Energy of a Crystal. (T) V. V. Voronkov. 12, 728 (1968) [12, 831 (1967)]
Theory of a Method of Experimentally Determining the Growth Rate of Metallic Crystals as a Function of Supercooling. (T/E) V. S. Gerasimenko and B. Ya. Lyubov. 12, 734 (1968) [12, 840 (1967)]
Electron-Diffraction Investigation of Thin CdS Films. (E) B. D. Galkin, N. V. Troitskaya, and R. D. Ivanov. 12, 766 (1968) [12, 878 (1967)]
Study of the Structure of Nematic p-Azoxyanisole in Magnetic Fields. (E) I. G. Chistyakov and V. M. Chaikovskii. 12, 770 (1968) [12, 883 (1967)]
Effect of Temperature on Thermal Diffuse Scattering in Polycrystalline Al and Cu. (E) V. I. Iveronova, A. A. Katsnel'son, I. I. Popova, and S. V. Sveshnikov. 12, 775 (1968) [12, 888 (1967)]
Hindered Motion and Phase Transitions in the Propionates. (E/T) I. P. Aleksandrova, L. I. Zherebtsova, and K. S. Aleksandrov. 12, 780 (1968) [12, 894 (1967)]
Phase Diagram of the Biphenyl-α,α'-Dipyridyl System. (E) S. A. Remyga, R. M. Myasnikova, and A. I. Kitaigorodskii. 12, 784 (1968) [12, 900 (1967)]
Elastic, Piezoelectric, and Pyroelectric Properties of Barium Nitrite Single Crystals. (E) V. V. Gladkii and I. S. Zheludev. 12, 788 (1968) [12, 905 (1967)]
Electric Conductivity of Quartz in an Alternating Electric Field. (E) T. M. Glushkova and M. M. Firsova. 12, 871 (1968) [12, 1000 (1967)]
Higher Order Elastic Constants of Cubic Crystals. (T) A. A. Nran'yan. 12, 876 (1968) [12, 1006 (1967)]
Effect of Doping on the Temperature Dependence of the Microhardness and Dislocation Structure of Semiconducting Single Crystals. (E) M. G. Mil'vidskii, V. B. Osvenskii, and O. G. Stolyarov. 12, 896 (1968) [12, 1030 (1967)]
Electrical Conductivity of Some Ferroelectric V-VI-VII-Group Semiconductors. (E) T. A. Pikka. 12, 938 (1968) [12, 1075 (1967)]
The Thermal Expansion of Molecular Crystals. I. Calculation of the Expansion Tensor for Naphthalene over a Wide Temperature Range. (E) A. P. Ryzhenkov and V. M. Kozhin. 12, 943 (1968) [12, 1079 (1967)]
The Microhardness of LiF as a Function of Temperature. (E) G. P. Upit, S. A. Varchenya, and L. G. Pavlovskaya. 12, 949 (1968) [12, 1084 (1967)]
Effect of a Steady Electric Field on Layer-Spiral Crystal Growth. (E) M. I. Kozlovskii. 12, 968 (1968) [12, 1099 (1967)]

THIN FILMS

Semiconducting Films, Magnetic Films, etc., Their Preparation and Physical Properties (see also: The Structures of Inorganic Compounds, Electron Diffraction)

Nature of the Acceptors and Carrier-Scattering Centers in Polycrystalline Germanium Films. (E) V. P. Kuznetsov. 12, 970 (1968) [12, 1101 (1967)]
Some Structural and Electrical Properties of Lead Sulfide Films. (E) R. V. Kudryavtseva, S. A. Semiletov, and G. I. Perevezentseva. 12, 86 (1967) [12, 109 (1967)]
Preparation, Structure, and Some Photoelectric Properties of Single- and Multilayer Monocrystalline Chalcogenide Films of the Types $A^{II}B^{VI}$ and $A^{IV}B^{VI}$. (E) L. A. Sergeeva, I. P. Kalinkin and V. B. Aleskovskii. 12, 90 (1967) [12, 113 (1967)]
Electron Diffraction Investigation of the Structure of SiO_2 Films Obtained by Different Methods. (E) P. V. Pavlov and É. V. Shitova. 12, 95 (1967) [12, 119 (1967)]
Some Aspects of the Growth of Epitaxial Germanium Films by the Sandwich Method. (E/T) I. D. Voronova and G. V. Chaplygin. 12, 99 (1967) [12, 125 (1967)]
The Structure of $CdS_x \cdot CdSe_{1-x}$ Films. (E) N. I. Dovgoshei and I. A. Gryadil'. 12, 123 (1967) [12, 148 (1967)]
Structure of Uranium in Thin Films. (E) L. D. Kolomiets. 12, 132 (1967) [12, 154 (1967)]
Amorphization of Polycrystalline Germanium Films on Irradiation with Argon Ions. (E) P. V. Pavlov, D. I. Tetel'baum, E. I. Zorin, and R. V. Kudryavtseva. 12, 134 (1967) [12, 155 (1967)]
Growth of Epitaxial Germanium Films by the Sandwich Method. (E) B. S. Kurbatov, E. V. Rakova, and G. A. Kurov. 12, 140 (1967) [12, 160 (1967)]

A Method of Producing Films Homogeneous in Composition from $A^{III}B^{V}$ Semiconducting Compounds. (E) M. D. Uspenskii. 12, 142 (1967) [12, 162 (1967)]

Thin-Film Piezoelectric Textures. (E/T) S. A. Semiletov and Z. A. Magomedov. 12, 326 (1967) [12, 376 (1967)]

Structure of Epitaxial CdS Thin Films Obtained by Sputtering in Vacuum. (E) Z. A. Magomedov. and S. A. Semiletov. 12, 470 (1967) [12, 536 (1967)]

Electron-Diffraction Study of Surface Diffusion in the Copper–Nickel and Copper–Silver Systems. (E) B. Ya. Pines, I. P. Grebennik, and I. V. Gektina. 12, 556 (1968) [12, 639 (1967)]

Crystal Structure and Electrical Properties of Indium Antimonide Films Deposited by the Three-Temperature Method. (E) K. V. Shalimova, A. M. Gulyaev, and S. A. Inozemtsev. 12, 569 (1968) [12, 653 (1967)]

Growth Figures and Dislocations in Rock-Salt Single-Crystal Layers. (E) V. M. Kosevich, V. M. Moskalev, and L. S. Palatnik. 12, 581 (1968) [12, 667 (1967)]

Structure of Germanium Thin Films. (E) A. I. Bublik. 12, 640 (1968) [12, 730 (1967)]

Dependence of the Electron Mobility in Indium Arsenide Films on the Crystallite Orientation. (E) V. A. Vlasov and S. A. Semiletov. 12, 645 (1968) [12, 734 (1967)]

Investigations of the Conditions of Formation and the Real and Atomic Structures of Thin Films in the USSR. (R) Z. G. Pinsker and S. A. Semiletov. 12, 702 (1968) [12, 801 (1967)]

Structure of Thin Indium Arsenide Films Prepared by Discrete Evaporation. (E) V. A. Vlasov and S. A. Semiletov. 12, 761 (1968) [12, 871 (1967)]

Electron-Diffraction Investigation of Thin CdS Films. (E) B. D. Galkin, N. V. Troitskaya, and R. D. Ivanov. 12, 766 (1968) [12, 878 (1967)]

Effect of Annealing on the Properties of the Mosaic Structure of Al and Sn Vacuum Condensates. (E) L. S. Palatnik, M. Ya. Fuks, B. T. Boiko, and P. A. Panchekha. 12, 793 (1968) [12, 911 (1967)]

Producing Degenerate Epitaxial Films of Germanium by the Iodide Method. (E) G. I. Uspenskaya, V. N. Shabanov, and V. A. Tolomasov. 12, 827 (1968) [12, 948 (1967)]

Electron-Diffraction Study of Tantalum Dioxide in Thin Films. (E) V. I. Khitrova, V. V. Klechkovskaya, and Z. G. Pinsker. 12, 907 (1968) [12, 1044 (1967)]

Structure of Ultrathin Films Produced by Vacuum Evaporation of Tantalum and Iridium. (E) D. I. Lainer and V. A. Kholmyanskii. 12, 913 (1968) [12, 1051 (1967)]

Single-Crystal Layers of Germanium and Silicon, Prepared by Pyrolysis of Hydrides. (E) T. A. Zeveke, L. N. Kornev, and V. A. Tolomasov. 12, 919 (1968) [12, 1058 (1967)]

Epitaxial Growth of Germanium in the Open Iodide Process. (E) V. N. Kolesnikov, É. A. Dem'yanov, and L. I. Dereza. 12, 975 (1968) [12, 1105 (1967)]

Diffraction of Slow Electrons: A Method of Studying the Atomic Structure of Surfaces. (R) V. F. Dvoryankin and A. Yu. Mityagin. 12, 982 (1968) [12, 1112 (1967)]

ERRATA

To the article "The Effects of Degree of Perfection on the Discontinuity in the Integral Absorption at the K Edge for Ge and As" by B. G. Zakharov (Soviet Physics – Crystallography, Vol. 11, No. 2, pp. 213-218, September-October, 1966).

Equation (1) on p. 213 should read:

$$\frac{E\omega}{I_0} = p_{H'} = \frac{K \cdot e^4 \cdot N \cdot \lambda^3}{\sin 2\theta_B \cdot m \cdot c^2} \cdot |F_{H'}| \cdot R_{H'}. \qquad (1)$$

Table 2 on p. 214: The first entry in the second column should be 0.600 instead of 1.600.

To the article "Polytypism in Molybdenite" by B. B. Zvyagin and S. V. Soboleva (Soviet Physics – Crystallography, Vol. 12, No. 1, pp. 46-52, July-August, 1967).

Table 1 on p. 48: In the structures Nos. 2, 4, and 8 the letters "T" and "O" should be interchanged.

To the article "The Compound $LaCo_{13}$ and Its Crystal Structure" by O. S. Zarechnyuk and P. I. Kripyakevich (Soviet Physics – Crystallography, Vol. 12, No. 3, pp. 438-439, November-December, 1967).

Page	Line and Column	Reads	Should read
438	12 – right	$La_2CO_{15}Al_2$	$La_2Co_{15}Al_2$
"	19 – right	Zn_{13} type	$NaZn_{13}$ type
"	24 – left	Th_2–Zn_{17}(φ-phase)	Th_2Zn_{17}(φ_2-phase)

To the article "Anisotropy of Thermoelectric Properties in Chromium Disilicide and in Single Crystals of the Highest Silicide of Manganese" by B. K. Voronov, L. D. Dudkin, and N. N. Trusova (Soviet Physics – Crystallography, Vol. 12, No. 3, pp. 448-449, November-December, 1967).

Table 1 on p. 449, Column 5 ($\sigma_\perp$):

Reads	Should read
4100	1410
5100	1510
5000	1500
4800	1480
5200	1520